

AJS

CUL - H05447 - F-EP 10

American

Journal

Sociology

Volume 96 Number 4

January 1991

MARRIAGE, FAMILY, AND THE LIFE COURSE

Assessing Competence and the Life Course — *Charles*

Marriage, Divorce, and Sons and Daughters — *Leifur*

Leifur and M. L. Langer

Influence of Parents' Marital History on Children — *Theodore*

Legal Custody and Children's Economic Welfare — *Solter*

Children and Marital Disruption — *Wallerstein and*

Class Mobility in Postwar Japan — *Isabella Gendron*

and Erikson

REVIEW ESSAY

Time on Children

The University of Chicago Press

WILLIAM L. PARISH, Editor

WAYNE BAKER, JULIE E. BRINES, and NADER SOHRABI, Associate Editors

WENDY GRISWOLD and DANIEL BRESLAU, Book Review Editors

VIRGINIA HARRIS BARTOT, STEPHEN J. ELLINGSON, LINGXIN HAO,
JOLEEN KIRSCHENMAN, SUNHWA LEE, and HAYA STIER, Associate
Book Review Editors

SUSAN ALLAN, Editorial Manager

JANE MATHER, Editorial Assistant

Consulting Editors ELIJAH ANDERSON • RONALD AMINZADE • RICHARD T
CAMPBELL • DANIEL B. CORNFELD • PAUL DIMAGGIO • MARY L. FENNELL •
GARY GEREFFI • DAVID F. GREENBERG • ROBERT ALUN JONES • BARRY MAR-
KOVSKY • ROSS L. MATSUEDA • RUTH MILKMAN • S. PHILIP MORGAN • TROND
PETERSEN • JONATHAN RIEDER • ROBERT J. SAMPSON • AAGE B. SØRENSEN •
JOHN D. STEPHENS • ANDREW G. WALDER • PAMELA BARNHOUSE WALTERS •
LAWRENCE L. WU • DAVID ZARET

International Consulting Editors RAYMOND BOUDON (France) • PIERRE BOUR-
DIEU (France) • TOM COLBJØRNSSEN (Norway) • GUDMUND HERNES (Norway) •
YONG-HAK KIM (Korea) • JOHN MYLES (Canada) • NORIKO O. TSUYA (Japan) •
BRYAN S. TURNER (England)

Editorial Board C. ARNOLD ANDERSON • GARY S. BECKER • CHARLES E. BIDWELL •
DONALD J. BOGUE • MARY C. BRINTON • TERRY NICHOLS CLARK • JAMES S. COLEMAN •
JOHN L. COMAROFF • GEORGE STEINMETZ • PHILIP M. HAUSER • EVELYN KITAGAWA •
NANCY LANDALE • EDWARD O. LAUMANN • DONALD N. LEVINE • DOUGLAS S. MASSEY •
JOHN F. PADGETT • EDWARD SHILS • FRED L. STRODTBECK • GERALD D. SUTTLES • MARTA
TIENDA • WILLIAM J. WILSON

THE AMERICAN JOURNAL OF SOCIOLOGY (ISSN 0002-9602) is published bimonthly in July, September, November, January, March, and May by The University of Chicago at The University of Chicago Press, Journals Division, P.O. Box 37005, Chicago, Illinois 60637. Subscription rates, U.S.A.: institutions, 1 year \$70.00, individuals, 1 year \$35.00. Student subscription rate, U.S.A.: 1 year \$25.00 (photocopy of valid student ID must accompany subscription). ASA and BSA members, 1 year \$30.00. All other countries add \$9.00 for each year's subscription to cover postage. Subscription agent for Japan: Kinokuniya Company, Ltd. Single copy rates: institutions \$11.75, individuals \$6.00. Back issues available from 1982 (vol. 88). Volumes in microfilm available from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106, and Kraus Reprint and Periodicals, Route 100, Millwood, New York 10546. Subscriptions are payable in advance. Subscriptions will be entered to start with the first issue to be published after receipt of order. *Claims for missing numbers* should be made within the month following the regular month of publication. The publisher expects to supply missing numbers free only when losses have been sustained in transit and when the reserve stock will permit. *Postmaster*: Send address changes to The University of Chicago Press, Journals Division, P.O. Box 37005, Chicago, Illinois 60637.

ADVERTISING space in THE AMERICAN JOURNAL OF SOCIOLOGY is available, as is rental of its subscriber list. For information and rates, please contact the advertising sales staff, The University of Chicago Press, Journals Division, 5720 South Woodlawn Avenue, Chicago, Illinois 60637, phone (312) 702-8187 or 702-7361. Advertising and list rental is limited to material of scholarly interest to our subscribers.

Copying beyond Fair Use The code on the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made beyond those permitted by Section 107 or 108 of the U.S. Copyright Law provided that copies are made only for personal or internal use or for the personal or internal use of specific clients and provided that the copier pay the stated per-copy fee through the Copyright Clearance Center, Inc. Operations Center, 27 Congress St., Salem, Massachusetts 01970. To request permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale, kindly write to Permissions Department, The University of Chicago Press, 5801 S. Ellis Ave., Chicago, Illinois 60637. If no code appears on the first page of an article, permission to reprint may be obtained only from the author. Second-class postage paid at Chicago, Illinois, and at additional mailing offices.

© 1991 by The University of Chicago. All rights reserved.

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984. ☺

AJS

American Journal of Sociology

Volume 96 No. 4 January 1991

CONTENTS



Marriage, Family, and the Life Course

- 805 Adolescent Competence and the Shaping of the Life Course
JOHN S. CLAUSEN
- 843 Local Marriage Markets and the Marital Behavior of Black and White Women
DANIEL T. LICHTER, FELICIA B. LECLERE, AND DIANE K. McLAUGHLIN
- 868 Influence of the Marital History of Parents on the Marital and Cohabital Experiences of Children
ARLAND THORNTON
- 895 Legal Custody Arrangements and Children's Economic Welfare
JUDITH A. SELTZER
- 930 Children and Marital Disruption
LINDA J. WAITE AND LEE A. LILLARD
- 954 Intergenerational Class Mobility in Postwar Japan
HIROSHI ISHIDA, JOHN H. GOLDTHORPE, AND ROBERT ERIKSON

Commentary and Debate

- 993 State and Business in Postwar Taiwan: Comment on Hamilton and Biggart
ICHIRO NUMAZAKI
- 999 The Organization of Business in Taiwan: Reply to Numazaki
GARY G. HAMILTON AND NICOLE WOOLSEY BIGGART

Review Essay

- 1007 Individualism Askew
CHARLES TILLY



Book Reviews

- 1012 *Scale and Scope: The Dynamics of Industrial Capitalism* by Alfred D. Chandler, Jr.
NEIL FLIGSTEIN
- 1014 *Values in the Marketplace: The American Stock Market under Federal Securities Law* by James Burk
MITCHEL Y. ABOLAFIA
- 1016 *Purchasing Power in Health: Business, the State, and Health Care Politics* by Linda A. Bergthold
VAL BURRIS
- 1017 *The Party Network: The Robust Organization of Illinois Republicans* by Mildred A. Schwartz
DAVID KNOKE
- 1019 *The Higher Learning and High Technology: Dynamics of Higher Education Policy Formation* by Sheila Slaughter
DAVID L. LEVINSON
- 1021 *Testers and Testing: The Sociology of School Psychology* by Carl Milofsky
JANE HANNAWAY
- 1023 *Apprenticeship for Adulthood: Preparing Youth for the Future* by Stephen F. Hamilton
AMY HEEBNER AND ROBERT L. CRAIN
- 1025 *Social Representations of Intelligence* by Gabriel Mugny and Felice Carugati
CARL MILOFSKY
- 1027 *The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy* by Ellen Condliffe Lagemann
JOHN H. STANFIELD II
- 1029 *Country Lawyers: The Impact of Context on Professional Practice* by Donald D. Landon
AUSTIN SARAT
- 1031 *Trade Unionism: Purposes and Forms* by Ross M. Martin
RAYMOND A. FRIEDMAN
- 1032 *Becoming a Mighty Voice: Conflict and Change in the United Furniture Workers of America* by Daniel B. Cornfield
HOWARD KIMELDORF

K-P-10

150
Amv 35

- 1034 *America and the Automobile: Technology, Reform and Social Change, 1893-1923* by Peter J. Ling
DAVID GARTMAN.
- 1036 *Urban Revolt: Ethnic Politics in the Nineteenth-Century Chicago Labor Movement* by Eric L. Hirsch
HOLLY MCCAMMON
- 1038 *Dangerous Truth: Interethnic Competition in a Northeastern Ontario Goldmining Center* by Peter Vassiliadas
PHILIP CORRIGAN
- 1040 *Continental Divide: The Values and Institutions of the United States and Canada* by Seymour Martin Lipset
EDWARD A. TRYAKIAN
- 1042 *The Enabling State: Modern Welfare Capitalism in America* by Neil Gilbert and Barbara Gilbert
LARRY W. ISAAC
- 1045 *Awash in a Sea of Faith: Christianizing the American People* by Jon Butler
ROBERT WUTHNOW
- 1047 *Literary Methods and Sociological Theory: Case Studies of Simmel and Weber* by Bryan S. Green
DONALD N. LEVINE
- 1050 *Theory in Practice: Tocqueville's New Science of Politics* by Saguiv A. Hadari
JEFF WEINTRAUB
- 1052 *Beyond the Barricades: The Sixties Generation Grows Up* by Jack Whalen and Richard Flacks
HOWARD SCHUMAN
- 1054 *Social Origins of the Iranian Revolution* by Misagh Parsa
BERTRAND BADIE
- 1055 *Why People Obey the Law* by Tom R. Tyler
H. LAURENCE ROSS
- 1057 *On the Borders of Crime: Conflict Management and Criminology* by Leslie W. Kennedy
ROBERT J. SAMPSON
- 1059 *Death Work: A Study of the Modern Execution Process* by Johnson
RAYMOND L. SCHMITT



- 1060 *Convict Workers: Reinterpreting Australia's Past*, edited by
Stephen Nicholas
PHILIP MCMICHAEL
- 1063 *Fertility Change on the American Frontier: Adaptation and Inno-
vation* by Lee L. Bean, Geraldine P. Mineau, and Douglas L.
Anderton
DAVID I. KERTZER
- 1065 *Pregnancy, Contraception, and Family Planning Services in In-
dustrialized Countries* by Elise F. Jones, Jacqueline Darroch For-
rest, Stanley K. Henshaw, Jane Silverman, and Aida Torres
KRISHNAN NAMBOODIRI
- 1066 *Family, Political Economy, and Demographic Change: The Trans-
formation of Life in Casalecchio, Italy, 1861-1921* by David I.
Kertzer and Dennis P. Hogan
PETER LASLETT
- 1068 *Older Adult Friendship: Structure and Process*, edited by Rebecca
G. Adams and Rosemary Blieszner
*Gettin' Some Age on Me: Social Organization of Older People in
a Rural American Community* by John van Willigen
CHRISTINE L. FRY
- 1071 *Pipe, Bible, and Peyote among the Oglala Lakota: A Study in
Religious Identity* by Paul B. Steinmetz
J. D. Y. PEEL

IN THIS ISSUE

JOHN S. CLAUSEN is professor of sociology, emeritus, at the University of California, Berkeley, and research sociologist at the university's Institute of Human Development. His current interests center on socialization processes and social behavior over the life course.

DANIEL T. LICHTER is associate professor of sociology and senior research associate of the Population Issues Research Center at Pennsylvania State University. His recent research has focused on racial inequality and underemployment in the U.S. labor force and on worker transitions between "good" and "bad" jobs. He has also begun a project (with David Eggebeen), funded by the National Science Foundation, on poverty and spatial inequality among American children.

FELICIA B. LECLERE is a research sociologist in the population studies section (Agriculture and Rural Economy Division) of the Economic Research Service at the U.S. Department of Agriculture. Her current research interests include the status of women, women's migration patterns, and the U.S. farm population.

DIANE K. MCLAUGHLIN is a research associate in the Population Issues Research Center and the Department of Agriculture Economics and Rural Sociology at Pennsylvania State University. Her research interests include the sociology of labor markets, rural poverty, and gender inequality in labor-market rewards. The study of local marriage markets complements her interests in the influence of local conditions on social processes.

ARLAND THORNTON is professor of sociology and research scientist at the Institute for Social Research of the University of Michigan. His research focuses on trends, causes, and consequences of marriage, cohabitation, divorce, fertility, gender roles, adolescent sexuality, and intergenerational relations. He conducts research on these topics in Nepal, Taiwan, and the United States.

JUDITH A. SELTZER is associate professor of sociology at the University of Wisconsin—Madison. Her research focuses on the social definition of kinship and on inequality within and between families. Her recent work examines the relationships among legal custody, paying child support, and visiting children after divorce. She is also investigating the effects of child-support payments, visiting, and conflict between parents on the welfare of children.

LINDA J. WAITE is senior sociologist and director of the Population Research Center and codirector for the Center for Aging Studies at the RAND Corporation. Her research interests include the family, marriage and divorce, women's employment, child care, and aging. She is the author, with Frances K. Goldscheider, of *New Families/No Families: Demographic Change and the Transformation of the Home* (University of California Press, forthcoming).

LEE A. LILLARD is senior economist and codirector of the Center for Aging Studies, and associate director of the Population Research Center at the RAND Corporation. His research interests include economic and demographic behavior in an aging population, economic returns to education and training in a dynamic labor market, economic models of marriage, cohabitation, and fertility timing, and economic models of litigant behavior. He is currently conducting related research on fertility patterns over the business cycle and simultaneity between fertility timing and marital duration.

HIROSHI ISHIDA is assistant professor of sociology and member of the East Asian Institute at Columbia University. His research interests include comparative social stratification and mobility, sociology of education, and Japanese studies. His forthcoming book, *Social Mobility in Contemporary Japan*, will be published by Macmillan.

JOHN H. GOLDTHORPE is an official fellow of Nuffield College, Oxford. Previous books include (with David Lockwood et al.) *The Affluent Worker* (Cambridge University Press, 1968–69) and *Social Mobility and Class Structure in Modern Britain* (2d rev. ed., Clarendon Press, 1987). He is presently working with Robert Erickson on a study of class mobility in industrial societies in the postwar period.

ROBERT ERIKSON is professor of sociology at the Swedish Institute for Social Research, University of Stockholm. Previous books in English include (with Rune Alberg et al.) *Welfare in Transition* (Clarendon Press, 1987) and *The Scandinavian Model: Welfare States and Welfare Research* (M.E. Sharpe, 1987).

CHARLES TILLY is University Distinguished Professor at the New School of Social Research. Having recently published *Coercion, Capital, and European States, A.D. 990–1990* (Blackwell, 1990), he is currently writing books on British popular collective action, 1758–1834, and on European revolution, 1492–1992.

Information for Contributors

Editorial Procedures: All papers deemed appropriate for the *AJS* are sent out anonymously to readers. The editors rely heavily on the judgments of those readers, although they are not bound by them. To protect anonymity, only the title should appear on the manuscript. Attach a cover page with the title of the manuscript, your name, and your affiliation. All identifying references and footnotes should appear on a separate page. A legible, carefully prepared manuscript will facilitate the work of readers. Manuscripts are accepted for publication subject to nonsubstantive editing with the understanding that the *AJS* has the right of first publication. Submission of a manuscript to the *AJS* is taken to indicate the author's commitment to publish in this *Journal*. No paper known to be under consideration by any other journal will be reviewed by the *AJS*. Upon publication, all rights, including subsidiary rights, are owned by the University of Chicago Press. The author retains the right to use his article without charge in any book of which he is the author or editor after it has appeared in the *Journal*.

Manuscript Acceptance Policy: While it is our policy to require the assignment of copyright on most journal articles and review essays, we do not usually request assignment of copyright for other contributions. Although the copyright to such a contribution may remain with the author, it is understood that, in return for publication, the journal has the nonexclusive right to publish the contribution and the continuing right, without limit, to include the contribution as part of any reprinting of the issue and/or volume of the journal in which the contribution first appeared by any means and in any format, including computer-assisted storage and readout, in which the issue and/or volume may be reproduced by the publisher or by its licensed agencies.

Preparation of Copy

1. Type *all* copy—including indented matter, footnotes, tables, and references—*double-spaced*, allowing generous margins at top, bottom, and sides of page. Please do not break words at ends of lines or justify right-hand margins. Indicate italics by underlining only. Number all footnotes, including acknowledgement footnote (which should be "1").

2. Type each table on a separate page. Refer to each table in numerical order in the text. Prepare tables without vertical lines. Tables should not contain more than 20 two-digit columns or the equivalent.

3. Clarify all mathematical symbols (e.g., Greek letters) with words in the margins of the manuscript.

4. Draw figures on white paper with india ink. Original or glossy print of professionally drawn figure will be required if manuscript is accepted.

5. Include a brief abstract (not more than 100 words) summarizing the findings.

6. *Four copies* of the manuscript and abstract, on white paper, must be submitted. Manuscripts should be addressed to the Editor of the AMERICAN JOURNAL OF SOCIOLOGY, 1130 East 59th Street, The University of Chicago, Chicago, Illinois 60637. *Manuscripts are not returned to authors.* Enclose a self-addressed stamped postcard, containing the manuscript title, to obtain acknowledgment of manuscript receipt. No other acknowledgment will be sent.

7. Each article submitted to the *AJS* must be accompanied by a check or money order for \$15.00, payable to The University of Chicago Press in U.S. currency or its equivalent by money order or bank draft. Papers will not be reviewed until this fee has been paid. The submission fee will be waived for papers solely by student authors. Submissions from students must be accompanied by a faculty member's certification of their student status. Citizens of countries with restrictions on the export of U.S. dollars may request waiver of the submission fee.

Format of References in Text: All references to monographs, articles, and statistical sources are to be identified at the appropriate point in the text by last name of author, year of publication, and pagination where appropriate, all within parentheses. Footnotes are to be used only for substantive observations. Specify subsequent citations of the same source in the same way as the first one; do not use "ibid.," "op. cit.," or "loc. cit."

1. When author's name is in the text: Duncan (1959). When author's name is not in text: (Gouldner 1963).

2. Pagination follows year of publication. (Lipset 1964, pp. 61-65).

3. For more than three authors, use "et al." For institutional authorship, supply minimum identification from the beginning of the complete citation. (U.S. Bureau of Census 1963, p. 117).

4. With more than one reference to an author in the same year, distinguish them by use of letters (a, b) attached to the year of publication: (1965a).

5. Enclose a series of references with a single pair of parentheses, separated by semicolons.

Format of References: List all items, including machine-readable data files (MRDF), alphabetically by author (providing the full list of multiple authors) and, within author(s), by year of publication, in an appendix titled "References." Examples follow:

Davis, James Allan. 1978. *General Social Survey, 1972-1978: Cumulative Data* (MRDF). NORC ed. Chicago: NORC. Distributed by Roper Public Opinion Research Center, New Haven, Conn.

Davis, K. 1963a. "Social Demography." Pp. 124-37 in *The Behavioral Sciences Today*, edited by Bernard Berelson. New York: Basic.

———. 1963b. "The Theory of Change and Response in Modern Demographic History." *Population Index* 29:345-66.

Goode, W. J. 1967. "The Protection of the Inept." *American Sociological Review* 32:5-19.

Moore, Wilbert E., and Arnold S. Feldman. 1960. *Labor Commitment and Social Change in Developing Areas*. New York: Social Science Research Council.

Sanford, Nevitt, ed. 1962. *The American College*. New York: Wiley.

U.S. Bureau of the Census. 1970. *Census of Population and Housing 1970, Summary Statistic File 4H: U.S.* (MRDF). DUALabs ed. Washington, D.C.: Bureau of the Census. Distributed by DUALabs, Rosslyn, Va.

Weber, Max. (1921) 1968. "Society's Problems." Pp. 12-16 in *Economy and Society*, edited by Guenther Roth and Claus Wittich. New York: Bedminster.

(Rev. 7/87)

Adolescent Competence and the Shaping of the Life Course¹

John S. Clausen

University of California, Berkeley

The life course is shaped by the interaction of cultural and social structural features with physical and psychological attributes of the individual and by the commitments and purposive efforts of the individual. In modern society, rationality and functionality have replaced tradition as determinants of individual choices in the transition to adulthood. Adolescent competence should lead to thinking through career and marital choices and inhibiting tendencies to make unwise choices. Therefore, competent adolescents should have more stable careers and marriages, and, because they will more often be rewarded for their attributes than will less competent ones, they should experience less personality change over the adult years. These hypotheses are largely confirmed with data from a longitudinal cohort studied for more than 50 years.

Societies and their cultures provide rough scripts and casts of characters whose interactions tend to shape individual lives. Physical and psychological attributes that reflect the interaction of genes and environmental influences also play a role in the creation of the individual life course. At the same time, the life course is a creation of the person; above all, human life is purposive. The basic premise on which this research was carried out is that, in the preadult years, general goals, abilities, and values are shaped by constitutional givens and by socialization experience in a particular sociocultural matrix and that these factors constantly interact with and modify the opportunities or obstacles that are encountered in the course of adult development.

¹ This is an extension and expansion of a paper presented at the meetings of the American Sociological Association in New York City in August 1986. The research was supported in part by grant AG-4178 from the National Institute of Aging. The most recent follow-up of all the subjects was funded by the MacArthur Foundation. I am indebted to Martin Gillens for organizing my computer files and programming much of the analysis as well as for helpful suggestions. Urie Bronfenbrenner, Robert Florentino, Carol Huffine, Davida Weinberg, and anonymous reviewers have all helped to improve the presentation of my argument and the evidence.

What one takes as the central focus of attention in studying the life course will depend on disciplinary perspectives, personal interests, and potentially available data. Psychologists are likely to be especially interested in continuity of personality through some segment of the life course (e.g., Block 1971; Costa and McCrae 1980); psychiatrists more often focus on the typical problems presented at different age levels (e.g., Erikson 1950; Gould 1978); and sociologists stress cohort effects and transitions from one stage or role set to another or performance within the most salient life roles (e.g., Elder 1974; Hogan 1981; Marini 1984; Riley, Johnson, and Foner 1972). My preferred conception of the life course entails negotiation by a reflexive self of a set of potentially available roles that are interlinked and to which persons commit themselves to varying degrees at different periods of their lives. I am less interested in the sequence of major events in transition from adolescence to adulthood (i.e., completion of education, leaving the parental home, initial employment, marriage) than in the adolescent's apparent readiness to take responsibility for self and the timing and firmness of commitments in employment and marriage. Above all, my focus will be on the consequences of early attainment of competence for occupational and marital careers and for personality stability or change over the life course.

CHOICE AND THE ORGANIZATION OF THE LIFE COURSE

In modern society, the individual has a greater number of potentially available roles to choose among than ever before, but the choices are constrained by the institutional structures within which the person must fit. Several writers on the life course (e.g., Kohli 1986; Mayer 1986; and Meyer 1986) have noted that the educational system, the world of occupations, and the period of retirement provide a very substantial degree of structure and scheduling for the individual life course. Much formal preparation is now needed for entering most occupational roles, preparation that entails education and the conferring of credentials. For career attainment, one can no longer plan to start at the bottom and work to the top in an industry or business; people entering at the bottom have no place to go, for jobs much above the bottom require specialized knowledge and skills that are not provided to workers in lower-level jobs. This is especially true in the "information society" of today, but it was largely true in the late 1930s and the 1940s, when the research subjects discussed here were making the transition to adulthood.

Rational assessment of opportunities has to a large degree replaced tradition as the primary basis for choices to be made. Moreover, selection for professional or bureaucratic careers strongly favors those who show high potential and plan for the development of that potential early in

their lives. Persons with special talents may achieve success through different routes than persons going into most professional and bureaucratic organizations and careers. Such special talents, especially artistic and athletic talents, may lead to high monetary and social rewards, but even here a high degree of training is likely to be required, and success is far less predictable than in professional and bureaucratic careers.

Adolescence is certainly not the period in which most persons are especially rational in their choices. It tends to be a time of highly labile emotions and of experimenting with varied experiences and identities. Erikson (1950) extolled using adolescence as a period of moratorium and saw a danger in "premature identity foreclosure." Adolescence is still a time of exploration and even moratorium for many youths, but a long moratorium may now entail serious costs to those without ample resources. Only youths from affluent families can continue their education and other less focused explorations without great struggle. Higher education, and possessing a reasonably clear idea of who and what one is and wants to be, now gives not only a head start but an acceleration that makes it difficult for late bloomers without special talents to catch up. Some degree of early identity closure—knowing what kind of person one wishes to be and the intellectual and moral enclave in which one wishes to participate—need not be foreclosure; it is almost essential for effective preparation for adulthood effectiveness. Thus I am not arguing that rationality prevails at adolescence but rather that there are considerable variations among adolescents in this respect and that later success is increasingly dependent on education and on making wise choices.

Given the constraints imposed by institutional structures and historical circumstances, the setting of realistic goals for oneself and preparation for reaching those goals should have payoff value. I hypothesize that personal orientations that entail such goal setting and preparation in adolescence will strongly influence the direction that the life course will take from early adolescence on. Adolescent choices will influence the major social roles occupied later in life, the stability of role performance, and the individual's attainment over the life course. School, work, and retirement may be phases in almost every life course, but they tell us only a small part of the life story. Depending on abilities, interests, and opportunities, individuals opt for different levels and types of education and allocate differing priorities to preparation for various adult roles. There exist general expectations as to when it is most appropriate to marry (Neugarten, Moore, and Lowe 1965), but these are less clear now than they were a generation ago, and it is individuals who decide when and whom to marry. It is individuals who decide if and when to have children and how many, although this decision may not be entirely under individual control. These choices may be left to chance; many adolescents

drift through their high school and early adult years riding whatever current there is, but, with drifting, the chances of a propitious landfall are diminished. All may not be lost, but those who, instead of drifting, set out with a plan will have a head start.

My argument (or my central hypothesis), then, is that it is important in the transition to adulthood to make choices that are to some degree thought through. They do not all have to be thought through in adolescence, but the competent adolescent will at least *begin* to contemplate these questions.

WHAT COMPETENCE ENTAILS

As a first approximation, competence entails knowledge, abilities, and controls. It entails knowing something about one's intellectual abilities, social skills, and emotional responses to others. It entails knowing one's interests and developing them. It entails knowing about available options and thinking about how to maximize or expand those options. Competence obviously also entails ability to make accurate assessments of the aims and actions of others in order to interact responsibly with them in pursuit of one's objectives. Further, the person must have sufficient self-confidence to pursue his or her goals and desires.

The life course begins to be organized by patterns and habits of intellectual analysis, interpersonal relations, and values and attitudes that are developed in the childhood and early adolescent years. I hypothesize that, by age 18, many young people will have developed the capacity to make realistic choices or at least to inhibit tendencies to make unwise choices. Parents or other adults who can provide an orientation to potential options and who can raise thoughtful questions to help the adolescent identify important issues can assist enormously. High intelligence and reasonable self-confidence will also enhance chances of success.

In his *Seasons of a Man's Life*, Daniel Levinson (1978) has suggested that no one life organization can have stability for more than a portion of a decade, because a life plan that fits one period will leave some of the individual's needs unfulfilled, so that there must be periodic reassessments and transitions. I propose that, if individuals choose wisely, they are more likely to remain satisfied with the choices that they have made. If they have anticipated future developments and contingencies and have the necessary abilities to do what they want to do, careful choices should produce more success than casual choices or mere drifting.

Studies of educational attainment among both men and women attest to the great importance of the family's socioeconomic status (SES), the adolescent's measured intelligence, and parental and peer encouragement

of higher education (Sewell, Hauser, and Wolfe 1980). In turn, educational attainment, coupled with continuing influences of the family's social status and the person's intelligence, predicts later occupational attainment to a high degree (Featherman 1980).

One might, indeed must, therefore look to measures of intelligence in the childhood years and to the family's prior economic status as early indicators of a general orientation toward achievement (whether measured by occupational status or other criteria). Long before the adolescent-to-adult transition, these are indicators of who is likely to make that transition via the route of longer school attendance and delayed entry into the labor market and perhaps the marriage market. They appear to be indicators both of socialization influences that promote desirable choices and of a greater probability of being able to sustain those choices and to achieve desired goals. Conditions that diminish chances, such as discrimination and economic instability, will lessen the predictive power of early competence.

EFFECTIVE COPING VERSUS MALADAPTATION

Recently, Glen Elder and his associates have presented a series of papers dealing with the transmission over several generations of maladaptive tendencies (especially those derived from early temper tantrums and lack of self-control) and, most recently, with the consequences for the individual life course of explosive behaviors in childhood (see, e.g., Caspi, Elder, and Bem 1988). Their "explosive children" are drawn from the population studied in this article. These subjects tend to be a subtype of those persons who show low competence in adolescence. Caspi et al. make a good case for the effects of personality on the life course, a topic that one can approach by focusing either on what makes for effective coping that leads to positive rewards or on what makes for maladaptive, self-defeating patterns that lead to "vicious cycles of development" as Brewster Smith (1968) observed.

I can hardly overstress the critical importance of timing in the acquisition of competence. Maturity tends to bring increasing skills in assessing what one must do to achieve success and smooth relationships with others. As we get older, we are more inclined to think of consequences before acting. Therefore, the attributes that distinguish highly competent adolescents from their peers are less likely to differentiate them in the later years. However, those who had the attributes in adolescence will have better prepared themselves for adult roles and will have selected, and been selected for, opportunities that gave them a head start. Thus, we are dealing not only with the importance of personality but also with

the strategic importance of an early attainment of competence. This is the most important point in my argument: the payoff value of early competence in contemporary, developed societies.

The sources of successful achievement and smooth life transitions are to be sought both in the person's own attributes, as given at birth and developed through childhood and adolescent socialization, and in subsequent experience of reasonably stable social and economic contexts and the absence of discrimination or impairment. Socialization for competence, coupled with a fair degree of native intelligence and economic opportunity, should prepare individuals for making realistic choices and acting on them as they negotiate the transition from adolescence into adulthood.

INDIVIDUAL AGENCY AND COMPETENCE

In recent years many behavioral and social scientists have stressed the importance of "individuals as producers of their own development" (Lerner and Busch-Rossnagel 1981; Brandtstadter 1984; Wells and Stryker 1988) and the critical phase of interaction in the early adolescent years of biological, cognitive, and sociocultural influences on cognitive development and on life chances. Brandtstadter (1984), in an article on personal and social control over development, stresses that effective "self-planned behavior" in the pursuit of personal goals, or in the service of particular values, rests on a knowledge of formal and informal cultural prescriptions and restrictions, on the constitutive rules for particular types of relationships, and on personal regulation. Such regulation entails (1) expectations about age-related changes and developmental outcomes, (2) subjective evaluations of expected developmental and age-related events, and (3) beliefs and assumptions about the possibilities of action in the face of such events in particular contexts. Realistic expectations and accurate assessments and assumptions should enhance the possibility of favorable outcomes.

There has also been renewed interest in competence or self-efficacy (Bandura 1977) as an important element in the individual's coping with life stress. Competence was earlier viewed primarily as an outcome variable, especially as a more promising successor to "adjustment," though with the recognition that competent persons produced other favorable outcomes for themselves (Foote and Cottrell 1955).

I shall not try to review the voluminous literature on this concept, but I will note that there is much support for the notion that some individuals are more effective than others in making positive events happen in the course of their development. Here I wish to show that longitudinal data can be brought to bear to demonstrate the extent to which an attribute

that I have called "planful competence" can influence the life course over a period of 40 or more years beyond adolescence. Elsewhere I shall present what evidence I can marshal as to the origins of planful competence.

COMPETENCE AS HERE DEFINED AND MEASURED

It is, however, necessary to spell out more fully what I mean by "planful competence" and to show its relationship to other conceptualizations and measures of adolescent competence. My formulation is quite similar to Brewster Smith's (1968) conceptualization of competence in studying Peace Corps volunteers. Smith (1968, pp. 282-83) demonstrated the importance of self-respect, feelings of efficacy, realistic goal setting, intelligence, and dependability for successful Peace Corps performance. More recently, Grotevant and Cooper (1988), in analyzing the role of family experience in the adolescent's career exploration, have proposed the following "key aspects of individual competence that mediate the capacity of adolescents to engage in such exploration" (p. 244): self-esteem, ego control and ego resiliency, and intellectual ability. In this article, adolescent "planful competence" is crudely measured by three (complex) components of personality, labeled self-confidence versus victimization, intellectual investment, and dependability. The reliable assessment of these components requires a substantial amount of information about a person's behavior in various situations, but I believe that the components as assessed are consonant with the conceptualizations just mentioned. A fuller description of the measures will be given shortly.

PREDICTED CONSEQUENCES OF ADOLESCENT COMPETENCE

High competence should tend to lead adolescents to make more realistic choices in education, occupation, and marriage. Such choices should more frequently satisfy individual needs over longer periods than would be true of the choices of persons lower in competence. In addition, these competent individuals will enjoy the advantage of being seen as desirable mates and employees and as potential leaders. If this is so, persons possessing these attributes should lead more stable lives, and the changes that they make in roles and relationships will more often derive from new opportunities becoming available or from the effect of external events beyond their control rather than from dissatisfaction or failure in a particular relationship or activity. Further, those who make well-thought-out choices early on will tend to show greater stability in their relationships and their other commitments throughout the life course. They should be less likely to divorce and less likely to shift careers, and

their networks of significant others should have greater continuity and persistence.

The stability of a marriage depends on the attitudes, temperaments, and ever-changing role relationships of two persons. It may seem unreasonable to expect that the adolescent personality orientations of either spouse will markedly affect the stability of the marriage except in the instance of psychopathology or deviance. We know, however, that very early marriages and marriages made with minimal acquaintance tend to be much more short-lived than those based on longer acquaintance between persons reasonably mature at the time of marriage. Moreover, from earlier analysis by Skolnick (1981), we know that self-confidence and a low level of hostile tendencies are associated with high marital satisfaction. One might anticipate that most planful, competent young men and women will not marry until they feel that they know what they are getting into and are ready to work out their relationships. Obviously, one partner may be much more planful than the other, and either one may change or turn out to have attributes that make a stable marriage unlikely. Nevertheless, adolescent competence should pay off for both men and women. Whether competence pays off more for one sex than for the other is a matter to be assessed. Dependability and self-confidence will not only influence the choice but should make the chooser a better candidate for a successful marriage. Mutual choice under such circumstances should predict a lasting marriage (or at least *longer-lasting* marriage in a period when there is much instability in marital ties).

If competent adolescents do indeed show greater stability in relationships and other commitments, I hypothesize that they should also show less change in personality from one period to another throughout the life course. They should experience more positive feedback by virtue of their educational and occupational attainment, tending to enhance the attributes they already possess. They should experience fewer sharp disappointments in their early adult years and fewer negative life events. Those low in adolescent competence will less often find satisfying job opportunities; I would expect them more often to shift jobs as well as spouses, and they should experience more pressures to change themselves over the early adult years.

To summarize, I hypothesize that, among adolescents who came to adulthood at around the time of World War II or since, those high in "planful competence" as contrasted with those low in competence should

1. obtain more education;
2. have lower rates of divorce and multiple marriages;
3. have more orderly careers (men only);
4. achieve higher occupational status (men only);
5. less often experience life crises such as unemployment, alien-

- ation of children, and other types of crises in which the individual's own behavior and dissatisfaction may play a role;
6. show less personality change over the life course (here, a period of 36–43 years beyond high school graduation).

Figure 1 presents a summary of hypothesized antecedents of adolescent planful competence and life patterns or experiences hypothesized as being affected by competence and as affecting personality stability over the life course. It collapses 50 years of data collection into three major periods: childhood and early adolescence, the senior high school years, and ages 53–62—the age of our study members at the time of most recent intensive follow-up. Apart from showing the effects of family SES, early IQ, and one measure of parenting on competence, this article will not deal with the antecedents of planful competence but rather with its consequences for the life course. Men's occupational attainment tends to be related to remaining in the same line of work and advancing within that line, but insofar as occupational experience affects personality stability, the orderliness of a man's career should be more important than his status level. Therefore, measures of both status and stability are of interest. In the case of women, almost none of whom had planned careers, I hypothesized that occupational involvement and attainment would be less related to competence and, if anything, would tend to produce personality change over the adult years because very few women had expected to become labor-force participants.

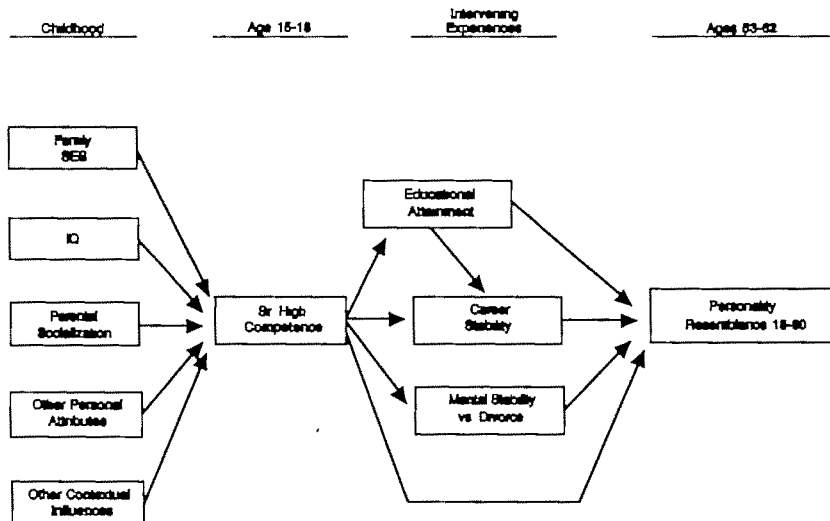


FIG. 1.—Hypotheses regarding antecedents and consequences of adolescent competence.

Adult personality growth and change are responsive to the conditions of occupational and family life that prevail for a given cohort, but in periods of high social stability I believe that selection processes based on early competence will play a major role in shaping the life course. Early choices are likely to produce lifelong consequences. This then is the problem I address in mobilizing data from the archives of longitudinal studies at Berkeley.

THE BERKELEY LONGITUDINAL STUDIES²

Between 1928 and 1931, three longitudinal studies were begun at the Institute of Child Welfare (now the Institute of Human Development) at the University of California, Berkeley. All three have endured long beyond the childhood years. The Guidance Study was initiated by Jean Macfarlane in 1928 with 248 boys and girls selected from every third birth in Berkeley from January 1, 1928, to June 30, 1929. Half the cases were designated to be the experimental subjects, their parents to receive guidance in child care, and the other half were to serve as controls. Because only the guidance group was studied intensively during childhood and adolescence, analyses of adolescent personality orientations are limited to members of that group. Guidance Study members were contacted again at ages 30, 40, and 53 for intensive assessments.

The Berkeley Growth Study was a much more circumscribed study of mental, motor, and physical development in infancy and early childhood, entailing frequent observation and testing in the early months of life with a subsample of 60 hospital-born children of white native-born parents, children who were born in the same time period as that covered by the Guidance Study. Studied through adolescence, they were reassessed at ages 37 and 53. Finally, the study originally designated as the Adolescent Growth Study (now the Oakland Growth Study) was initiated in 1931 to examine the social, intellectual, and physiological development of a cross section of boys and girls from preadolescence through the high school years. The sample comprises slightly over 200 boys and girls ranging in age from 10 to 12 at the time of their graduation from one of five Oakland elementary schools. These children constituted the large majority of graduates who subsequently attended a particular academically demanding junior high school that served as a center of research operations. They approximate a random sample of the white students except for elimination of students regarded as academically deficient (primarily males from lower-working-class homes) and those whose parents did not speak En-

² The studies are more fully described in Eichorn (1981).

lish. Oakland Growth Study subjects were interviewed intensively at ages 37, 48, and 62.

The original study groups comprised slightly over 500 boys and girls, of whom approximately 390 remained in the studies through the high school years. Data were secured from 281 study members and from the majority of their spouses in a recent follow-up that was implemented when the study members ranged in age from 53 to 62 years. A substantial segment of those lost to the study moved away during the school years, and at least 50 study members had died prior to the last follow-up; I estimate that the last follow-up obtained current data on roughly four-fifths of the sample under study at high school graduation and still surviving to the present time. It may be noted that there are two age cohorts differing in age by seven or eight years. For the analyses to be reported here, the three samples have been merged. While data collection in the early years often entailed different techniques and instruments (though with some overlap), all three have been subject to exactly the same follow-up procedures and measures in their later middle years.

The Guidance Study relied very heavily on interviews, while the Oakland Growth Study and the Berkeley Growth Study relied much more heavily on observations, inventories, and tests. Merging the studies therefore posed a serious challenge to somehow securing comparable classification. Thirty years ago, my colleagues and I sought comparability in classifications of personality and social functioning by the use of Block's (1961) California Q-sort.³ The California Q-sort consists of 100 descriptive terms written on small cards, relating to personality and behavior (e.g., "has a wide range of interests," "is calm and relaxed in manner," "has hostility toward others"). These cards are sorted into nine piles according to whether they are highly descriptive (9) or not at all descriptive (1) of the person. Judges (experienced clinical psychologists and social workers) read through materials relating to a given period in the study member's life and then sorted the items of the Q-sort according to their salience in describing the person at this period. The resulting, roughly normal, distribution provides an ideographic characterization of the individual, that is, a description of what are the most salient and least salient attributes of a given person, regardless of how that person's characteristics compare with those of other persons. Because of the large number of items entailed, however, this unique characterization correlates very substantially with a nomographic or normative classification (comparing

³ The original set of 100 items (Block 1961) was rephrased somewhat for application to the adolescent subjects in their junior high and senior high school years to give as close equivalency as possible to attributes phrased for the adult years.

relative levels on the same attributes) based on unforced ratings.⁴ No judge ever sorted more than a single life period for any subject, nor did any judge involved in the sorting have a knowledge of the study members in periods prior to or subsequent to that for which they were sorting. Thus there is complete independence in the scores for each period. To enhance reliability, at least two sorts were done for each person at each period.

Personality Q-sorts were performed for the junior and senior high school years for all study members seen in the first adult follow-up, except control subjects in the Guidance Study, and for the adult years for all those interviewed at each period, most recently at age 53–54 for the younger cohort and age 61–62 for the older. Where an individual's data for any period were seriously incomplete, the data set lacks Q-sorts. The lack is, unfortunately, most serious in the adolescent years; we lack Q-sorts from the high school years not only for the control subjects but also for those not seen at the first adult follow-up. Funding for adolescent sorting had been provided only at that initial follow-up, and the cost of additional adolescent sorts was beyond the budgetary limits of subsequent grants. In general, unavailability of early Q-sorts does not have a biasing effect but rather constricts the number of subjects. For most analyses that relate adolescent personality measures to later outcomes, 60–70 cases are available.

The Q-sort enables us not only to assess personality at each time period but also to examine the amount of personality change for any individual from one period to another, subject to the constraint that the mean reliability of the Q-sort profile for an individual, representing the composited ratings of two or three judges for each period, ranges from .69 to .76. When allowance is made for attenuation due to unreliability, correlations between time periods that exceed .50 for any person suggest relatively little change, while those below .30 suggest substantial change.

A new technique of component analysis, developed by Millsap and Meredith (1988), was applied to scores on the Q-sort items from all periods to yield a set of six components of personality that can then be scored for each period.⁵ These components, more stable than individual items, provide my primary measure of personality or personal orientations. The index of planful competence in the analyses to be reported is the sum

⁴ A subsample of 30 cases was coded on a 1–9-point scale in response to concerns of reviewers of an earlier grant proposal. Mean values of almost all items differed insignificantly from those derived from the forced normal distribution prescribed for the Q-Sort.

⁵ Mean scores on the components differ considerably over the life course. For details, see Haan, Millsap, and Hartke (1986).

of the three components: *dependable*, *intellectually invested*, and *self-confident versus victimized*.

When I compared the correlations of junior high competence and those of senior high competence with later life outcomes, the senior high assessments were almost always more highly predictive. Nevertheless, a compositing of the two assessments yields a gain in reliability that appears to offset the relatively modest changes from junior to senior high (interperiod correlations of .75 for males and .65 for females). Therefore I have consistently used as a measure of adolescent competence the mean of the scores for the junior and senior high school years. In a few instances, other measures from only the senior high years will be employed when age changes bring marked changes in behavior (e.g., interest in the opposite sex becomes much more salient in senior high).

Further description of the components of competence is called for. "Dependable," the most crucial element, loads most heavily on the positive end on the following items: "is a genuinely dependable and responsible person," "is productive, gets things done," and "tends toward over-control of needs and impulses." Dependable persons received low scores, on the other hand, on "tends to be rebellious," "is self-defeating in regard to his/her own goals," and "characteristically pushes and tries to stretch limits; sees what he/she can get away with." Thus we have the connotation of responsible, dependable behavior but also of self-control, regard for the rules of everyday life, and freedom from self-defeating tendencies (suggesting a degree of ego resilience).

"Intellectually invested" incorporates both intellectual ability and the effective use of one's intelligence. On the positive end it incorporates "genuinely values intellectual and cognitive matters," "has a high degree of intellectual capacity," and "is introspective; self-observing; concerned with self as an object." Attributes loading negatively are "is uncomfortable with uncertainty and complexities," "values self and others in terms set by the group, like 'popularity,' presumed adolescent norms, social pressures" (i.e., conventional, conforming), and "disorganized and maladaptive when under stress or trauma; has a small reserve of integration," another attribute that connotes low ego resilience.

Finally, "self-confident versus victimized" connotes both a measure of self-esteem and the ability to interact in a positive way with others. The strongest positive contributions come from "feels satisfied with self," "is calm, relaxed in manner," and "is cheerful." On the negative end, we have "self-pitying; feels cheated and victimized by life," "behaves as if generally fearful in manner and approach," and (again) "is self-defeating." A number of other attributes connoting positive or negative tendencies in behavior have lower-level loadings.

Thus the concept of planful competence not only entails the notions of

dependability, productivity, and effective use of one's intelligence but also self-esteem and the ability to interact positively with others. Because of the small number of cases involved, the scores of the three components (which have approximately equal SDs) are simply added together to obtain the index of planful competence for use in multiple regression analyses. In any instance where a single component correlates more strongly than the index does, the single component will be reported.

Data are available on the number of jobs held by men and women and the orderliness of careers (based on complete occupational histories derived from each follow-up), and the most recent interviews contained several indicators of career satisfaction and career stability. The interviewer asked, for example: "Thinking back over your whole work life, when would you say you felt quite certain that you were doing the *kind* of work that you wanted to do, or have you never felt that way?" Early career stabilization in a satisfying occupation gives us one index of stability. Never finding a congenial kind of work gives us the other extreme. Orderliness of career and the variable we named "when sure" are the measures of stability used for the men in the study.

The problem of assessing stability in the life course is much more difficult for women than for men. The great majority of those women who came to adolescence just before or just after World War II were, from an early age, oriented to getting married after they had finished their education. As several women commented in reviewing their lives with us, they were "programmed for marriage." This was as true for those who went to college as for those whose education did not extend beyond high school. Most of them worked for a year or two, rarely as much as five years, and then left the labor force for 10 or 20 years, if not for life. Most did ultimately return to the labor force, and they did so for a number of reasons, among them the termination of marriage. Therefore there is little reason to expect that early planfulness had much to do with orderly careers or later occupational attainment except for the handful of women who consistently pursued careers of their own. Most women's early adult lives were contingent on the careers of their husbands.

Personality change from adolescence to the early adult years, as well as over the adult years, is assessed by comparison of individual Q-sort profiles, based on 72 items with consistently high reliabilities, available for adolescence and each follow-up. That is, for each individual, the adolescent score on each item is correlated with the score for the item as of later maturity. The correlation coefficient then becomes a resemblance score, or, if subtracted from one, a change score. When we assess the effects of early competence, we can at the same time ask, To what degree have various intervening experiences—specifically education, occupa-

tional careers, divorce—influenced personality change over the adult years?

A subsample of 60 cases selected randomly from the group was interviewed two years after the last general follow-up to inquire, retrospectively, how they viewed their lives. Of particular interest are their answers to questions about their self-knowledge in adolescence and their awareness of the options available to them. The major variables used in the analyses to be reported are shown in table 1, with means and SDs. Other variables will be described when introduced. Matrices of intercorrelations of all the major variables utilized are given in the Appendix in tables A1 and A2.

RESULTS

Family social status and intellectual ability are among the postulated determinants of adolescent competence and have been demonstrated to influence many life outcomes. Both variables are significantly related to the overall index of competence and to the components "intellectually invested" and "dependable" but not to "self-confident." (For examination of the intercorrelations of the components and of their relationships to parental SES and IQ, see App. tables A1 and A2.) In a multiple regression, IQ at age 18 and parental SES at birth account for roughly one-fifth of the variance in adolescent competence for females and three-tenths for males.⁶

The components of competence are moderately intercorrelated, the strongest relationship being that between intellectual investment and dependability—.60 for males, .41 for females—with self-confidence and intellectual investment also significantly related for both sexes. The components are sufficiently strongly related for males to suggest that, in combination, they may provide a useful index for the multifaceted concept of competence, but the much lower intercorrelations for females suggest that a composite index of competence based on these components is likely to be less satisfactory for the women. As we shall see, single

⁶ Many aspects of early parenting appear to influence competence. parental harmony, stress on achievement, consistent rule enforcement, and maternal attentiveness are all significantly correlated to competence, though differentially for boys and girls. Because of the small sample, however, it is not feasible to include more than two other variables with IQ in multiple regressions. When the best two parenting measures are included with IQ at age 12, the explained variance in adolescent competence (adjusted R^2) is raised to 37% for females and 50% for males. Sample size is the major rationale for seeking a single powerful index that can serve as a proxy for family background, native abilities, and socialization experiences in childhood in studying life outcomes.

TABLE 1

MAJOR VARIABLES UTILIZED, WITH MEANS AND STANDARD DEVIATIONS

Variable	Mean	SD
Parental SES (combined Hollingshead [weighted] scores for mother's education and father's education and occupation at subject's birth):*		
Male	53.7	24.6
Female	55.7	22.9
Adolescent IQ (Wechsler-Bellevue form 1 for Guidance Study and Berkeley Growth Study and 1937 Stanford-Binet for Oakland Growth Study):		
Male	122.5	12.9
Female	118.2	10.9
Depression deprivation (percentage unemployed or with 30% income loss [Elder 1974]):		
Male	49.2	50.0
Female	54.8	50.0
Adolescent planful competence (see text for description and for details on component relationships; range, -60 to +141).		
Male	39.5	54.0
Female	36.7	41.4
Educational attainment (Hollingshead scale: 1 = graduate professional training; 7 = less than seven years):*		
Male	2.26	1.1
Female	3.04	.95
Occupational status (Hollingshead [unweighted] categories as of current or last job if retired within five years):*		
Male	2.48	1.50
Female	3.31	1.10
Orderly career (1-6 scoring: 1 = all jobs in same field, with increasing responsibility, 6 = frequent shifting, with little continuity):*		
Male	2.11	1.3
Female	2.99	2.0
"When sure" in right job (career stage or age at which men say they felt in right line of work: 1 = while in college or by age 20, 2 = from time began work or in twenties; 3 = in thirties; 4 = after age 40; 5 = never have, men only, asked at ages 53-62) .	30.08	1.21
Percentage of years in labor force (percentage of years in labor force between completion of education and age at 1982 follow-up; women only) .	44.4	29.0
Personality profile resemblance, adolescence to later maturity (Pearson r between scores on 72 items common to adolescent and age 53-62 personality Q-sorts):		
Male .....	.294	.286
Female .....	.283	.252
Marital satisfaction (mean of self-rating and judges' rating, both made at ages 53-62, weighted equally for 1-10 scale).		
Male	7.2	1.7
Female	6.8	1.9
Competence in later maturity (same components as adolescent planful competence, assessed at 53-62):		
Male	70.5	48.8
Female	59.9	45.8

* Sign reversed for correlations

TABLE 2

ORDINARY LEAST SQUARES REGRESSION OF ULTIMATE EDUCATIONAL ATTAINMENT
ON VARIABLES ASSESSED BEFORE HIGH SCHOOL GRADUATION

INDEPENDENT VARIABLES	EDUCATIONAL ATTAINMENT					
	Males			Females		
	Zero Order	β		Zero Order	β	
		Model A	Model B		Model A	Model B
Parental SES .....	.44**	.15	.11	.62**	.36**	
IQ at age 17-18 .....	.56**	.25*	.23*	.52**	.29**	
Planful competence .....	.68**	.54**	...	.40**	...	
Self-confident .....	.33**	..	...	.09	..	
Intellectually invested .....	.63**	..	.31*	.42**	.02	
Dependable .....	.61**	..	.34**	.47**	.30**	
Adjusted R^2 .....		.55	.56		.45	
N		70	70		74	

NOTE.—Regression uses Hollingshead educational scale with signs reversed. An ellipsis indicates the variable was not entered.

* $P < .05$.

** $P < .01$.

components, especially dependability, will frequently be found to exert more influence than the composite in multiple regression models for female study members.

Educational Attainment

In general, family SES and IQ have been found to be the strongest predictors of educational attainment for both sexes, with the former variable usually somewhat stronger for females. Table 2 shows the zero-order correlation and regression coefficients of these background variables with subsequent educational attainment and those of the components of planful competence as well as the index of competence itself.⁷ All three components of the competence index correlate significantly with educational attainment for males, while self-confidence is unrelated for females.

For males, the composite index and two components of competence correlate more substantially with educational attainment than does either

⁷ The Hollingshead educational scale has been used in all of the analyses of educational attainment here presented. It is, of course, very highly correlated with years of school completed. The mean value of years of school completed by members of the sample studied is 15.9 for males (SD = 2.5) and 14.3 for females (SD = 2.2).

parental SES or IQ. Since the composite index yields the highest correlation, it alone was used together with IQ and parental SES (model A) to predict educational attainment. Because the contribution of self-confidence is modest, a second model including the separate components—"intellectually invested" and "dependable"—together with IQ and SES (model B) was tried, and it explains a shade more variance than does the use of the competence index alone.

For females, at the level of zero-order correlations, parental SES and IQ are more strongly related to educational attainment than either the index of competence or any of its components. Dependability and intellectual investment nevertheless show substantial correlations, and both are superior to the composite index, so the two components were entered into the multiple regression model in place of the index of competence. Intellectual investment no longer shows an effect when IQ is entered into the predictive model, but dependability remains a highly significant contributor to explained variance. For both sexes, adolescent dependability appears to be an extremely important ingredient in high educational attainment. Self-confidence is less important than the other two components of competence, but for males especially, high adolescent competence adds substantially to the amount of variance explained by parental SES and IQ.

Occupational Attainment

The strongest predictors of occupational attainment in the standard models based on large samples are family SES, IQ, and educational attainment (Sewell et al. 1980). Table 3 presents the zero-order correlations and the standardized β coefficients showing the influence of these variables and of planful competence on ultimate occupational attainment when all four independent variables are entered in a multiple regression. For males, each of the components of competence is substantially related to occupational attainment, and the largest contribution to explained variance in occupational attainment comes through adolescent competence. The variance explained by the four-variable model of ultimate occupational attainment for men (.54) compares with the .468 reported by Sewell et al. (1980) using a 17-variable model. Many of the 17 variables, such as parents' income, family intactness, parental, peer, and teacher encouragement, and occupational status aspirations, are precisely the diet by which competence is nurtured. The measure of competence in the high school years, then, encapsulates the result of many positive early experiences that will ultimately be manifested in high occupational attainment.

For women, however, our index of adolescent planful competence is

TABLE 3

ORDINARY LEAST SQUARES REGRESSION OF OCCUPATIONAL STATUS IN LATER MATURITY (AGE 53-62) ON ANTECEDENT MEASURES OF MALES AND RECENTLY EMPLOYED FEMALES

INDEPENDENT VARIABLES	OCCUPATIONAL STATUS				
	Males		Females		
	Zero Order	β	Zero Order	β Model A	Model B
Parental SES . . . . .	.20	.05	.43**	.08	. . .
IQ at age 18 . . . . .	.51**	.06	.50**	.17	.40**
Educational attainment . . . . .	.57**	.23*	.58	.21	.32**
Adolescent competence . . . . .	.71**	.60**	.20	. . .	. .
Self-confidence . . . . .	.46**	. . .	.01	. . .	. . .
Intellectual involvement . . . . .	.59**	. . .	.35**	.20	. . .
Dependability . . . . .	.66**	. . .	.05	. . .	. . .
Percentage of years in labor force	. . .	. . .	.17	. . .	.22*
Adjusted R^2 . . . . .	. . .	.54	. . .	.23	.45
N . . . . .	. . .	64	. . .	45	45

NOTE.—An ellipsis indicates the variable was not entered

* $P < .05$

** $P < .01$.

inconsequential as a predictor of ultimate occupational attainment. Of the components, only intellectual investment shows a significant zero-order correlation with occupational status, and that only modestly. Intelligence and family status predict educational attainment, as we have seen above, and, both at the zero-order level and in multiple regression models, educational attainment is by far the strongest predictor of occupational attainment for this cohort of women. Indeed, the four variables used to predict men's occupational attainment (substituting intellectual investment for the competence index) explain no more variance in women's occupational attainment than that explained by education alone. The small amount of variance explained for women is largely a consequence of the cohort we are dealing with—women born in the 1920s. Only about half have had more than 10 years of steady labor-force participation. Women who were in the labor market for short periods would be unlikely to benefit greatly in occupational status from high intelligence or high educational attainment. Moreover, in this cohort, high adolescent competence tended to be associated with marriage to a man of relatively high educational and occupational status and to rearing a family rather than pursuing a career (except for that small group of women who obtained graduate education). Women's competence scores correlated with the number of children they bore at .41, and the more

children a woman had, the less her labor-force participation ($r = -.25$, $P < .01$).

If the model explaining a woman's occupational attainment includes a measure of her amount of participation in the labor force (in this case the percentage of years in the labor force after completion of education), the amount of variance explained is more than doubled, but the components of competence do not add to the contributions of education and IQ. As in the case of educational attainment, adolescent intellectual investment is a much less powerful predictor for females than adolescent IQ when both are employed to predict ultimate occupational status.

Men's Career Stability and Satisfaction

I consider now the relationship between the index of planful competence and (1) the orderliness of men's careers and (2) recent self-reports as to when study participants felt sure they were doing what they really wanted in their occupational careers. The orderliness of a man's career is strongly related to his occupational attainment, since orderliness is defined partly in terms of increasing job status within a sequence of functionally related jobs (Wilensky 1961). A man's feeling sure that he is in the right job is not so strongly related to occupational attainment as is orderliness of career but is perhaps more clearly an indication of having made the right choice for himself. Both orderliness and the feeling of being in the right job relatively early in one's career are significantly related to adolescent competence (correlations of .39 and .45, respectively). Both educational and occupational attainment also correlate substantially with the orderliness of a man's career, and one might anticipate that all of the contribution of adolescent competence comes through these two variables. This is not the case. Inclusion of adolescent competence in a multiple regression with educational and occupational attainment to predict orderliness raises the amount of variance explained (adjusted R^2) from .23 to .28.

Neither educational nor occupational attainment is significantly related to a man's reporting that he felt sure, relatively early in his career, that he was in the right job. The strongest correlates are having been assessed as dependable and intellectually invested in adolescence. Of men who had scored in the top third on the index of planful competence, two-fifths said that they had felt certain they were in the right line of work either while they were still in school or right from the beginning of their careers, and only one man (of 22) said he had never found the right line of work. Of those in the bottom third, on the other hand, only 16% felt that they had been in the right line of work early on, and nearly two-fifths reported that they had *never* found the right line of work for themselves. Men

high in planful competence experienced only one-third as many shifts in occupation or career goals as those low in adolescent competence, and those low in competence occupied significantly more jobs over the course of their careers.

Men's satisfaction with their jobs and especially with their careers is somewhat related to adolescent competence but only because of a much stronger relationship to adolescent self-confidence: $r = .36$ for the Michigan facet-free measure of job satisfaction (Quinn and Staines 1979). As in many other studies of job satisfaction, no appreciable relationship between occupational level and job satisfaction is found in this sample (see Staw, Bell, and Clausen 1986).

Marital Careers

Each of the components of adolescent competence was associated with earlier, rather than later, age at marriage for men, though the relationship was significant only in the case of self-confidence. For women, as expected, those who had been highly dependable in adolescence married significantly later than their peers, while the other two components were essentially unrelated to age at marriage. Women's educational attainment influenced their age at marriage far more than did men's.

Competent adolescents were only slightly less likely to divorce than were their less competent peers. However, higher scores on the single component adolescent dependability predicted less likelihood of divorce ($r = .34$, $P < .01$) for women. Also significantly related to divorce for both sexes were interest in the opposite sex while in senior high school and, for women only, age at marriage. When these two variables are entered along with "dependable" into a logistic regression, "dependable" is the only variable to retain a significant relationship to divorce ($P < .02$, for women only).

For both sexes, significant relationships were found between competence and number of marriages. When the men and women of the sample were ranked on adolescent planful competence, more than 90% of those in the top third were married only once, as against only a little over half of those in the bottom third. No one in the top third was married as many as three times, but among both men and women in the lower third, roughly one in seven had been married three or more times.

For men, both adolescent intellectual involvement and dependability were significant predictors of number of marriages, the former having a stronger correlation ($.33$, $P < .01$) than the total competence index. Neither adolescent IQ nor educational attainment was significantly correlated with number of marriages, but occupational status in later maturity was ($r = .37$, $P < .002$). In a multiple regression, combined with intellec-

tual involvement and dependability, occupational status alone shows a significant effect on number of marriages. It is not clear whether multiple marriages impede career progress or whether successful men are less likely to become divorced more than once. There is not a significant (or even appreciable) relationship between a man's being divorced once and his occupational status.

Women who scored high on adolescent planful competence also had significantly fewer marriages, but again dependability showed a stronger relationship ($r = .31$, $P < .01$) than did the index of competence. When adolescent dependability is entered into a multiple regression with interest in the opposite sex as of senior high school and age at first marriage, it is dependability that yields the strongest standardized β (significant at $P < .02$), and together the three variables account for roughly one-fourth of the variance in number of marriages for women (model significant at $.0001$). The prediction for men is much more modest.

Marital satisfaction shows a relationship to adolescent competence for women ($r = .35$, $P < .01$) but not for men. While all three components of adolescent competence are positively related to women's marital satisfaction, adolescent self-confidence shows the strongest relationship ($r = .40$), as strong as any combination of antecedents used in the multiple regression.

Planful Competence, Role Stability, and Lifetime Personality Change

The issue of personality constancy or change has long been debated, and the number of published discussions has multiplied greatly during the past decade or two (Mischel 1968; Block 1977; Costa and McCrae 1980; Nesselroade 1988). Certain facets of personality, especially cognitive skills, have high stability, while others seem much more variable over situations and over time. Most discussions of constancy or change deal with population or average continuity, but clearly some people change more than others. To my knowledge, few studies have addressed this question. Perhaps the most sophisticated one that did address it was Block's (1972) report based on data from a 1958–59 follow-up of the Guidance Study and the Oakland Growth Study members included in this article, demonstrating that subtypes of adolescent personality varied greatly in degree of personality change from adolescence to the early thirties.

The hypothesis to be tested here is that men and women who scored high on adolescent planful competence show substantially less change in personality from their adolescent years to later periods in the life course than do those low in competence. Stability of roles and relationships should provide a social framework for the maintenance of personal orien-

tations. This does not imply that under conditions of high stability in one's social matrix no personality change takes place. Rather personality change should be less for persons whose commitments remain reasonably constant than for those who go through a succession of changes in their most salient roles and relationships. In addition, attributes that lead to positive rewards should be reinforced, so that there should be greater continuity on this score as well.

Overall, personality profiles in later maturity show little resemblance to those of adolescence. The median correlation between individuals' adolescent personality profiles on the 72 most reliable Q-sort items and their profiles at the latest follow-up is .30 for men and .28 for women.

Do those men and women who had been highly competent in adolescence show less change than their less competent peers? Yes, and to a remarkable degree. The zero-order correlations between the index of planful competence in adolescence and the resemblance of personality profiles over the ensuing 40-45 years are .72 for men and .46 for women (both significant at $P < .001$). Men who ranked in the top third on adolescent competence had a median personality resemblance score (correlation between senior high personality scores and scores at ages 53-62) of .56 while those in the bottom third had a median score of only .16. For women the comparable medians were .40 and .18, respectively.

Table 4 shows the contribution of the total index of competence and each of the components to personality resemblance at the early adult

TABLE 4
REGRESSIONS OF PERSONALITY (SELF) RESEMBLANCE, SENIOR HIGH TO EARLY ADULTHOOD, AND SENIOR HIGH TO LATER MATURITY, ON ADOLESCENT COMPETENCE AND ITS COMPONENTS

INDEPENDENT VARIABLES	PERSONALITY RESEMBLANCE IN ADULTHOOD			
	Males		Females	
	Senior High- Early Adult	Senior High- Later Maturity	Senior High- Early Adult	Senior High- Later Maturity
Adolescent competence				
index (r) ... ..	.52**	.72**	.52**	.46**
Components in multiple re- gression (β):				
Self-confident .....	.03	.35**	.01	.20
Intellectually invested.....	.28*	.30*	.30**	.11
Dependable. ....	.32**	.22	.35**	.34**
Adjusted R^2. ....	.27	.49	.30	.19
N	91	68	96	75

* $P < .05$.

** $P < .01$.

K-P-10

follow-up (ages 30 and 37) and the most recent follow-up (ages 53–62). It will be noted that for males there is greater resemblance with adolescent personality in later maturity than there was when the men were in their thirties, while the reverse is true for females. The relatively modest decrease for women and the increase in resemblance with adolescent personality for men may seem surprising, since considerable personality change took place during the 23–25 years that intervened between these follow-ups. Intermediate change is itself predictable to a surprising extent, but further discussion takes us beyond the scope of this paper. Suffice it to note that personalities continue to change through the adult years, and different phenotypic manifestations appear to reflect life circumstances (see Peskin and Livson 1981). It is for this reason that the term resemblance (at a given period) seems preferable to stability or continuity.

Entered into a multiple regression equation, each of the three components is to some degree related to personality resemblance for both sexes. Early self-confidence becomes a more potent predictor of personality resemblance to later maturity than to early maturity, though it is not quite significant for women. Dependability is the most significant predictor to early adulthood for both sexes, but for men it drops off somewhat in its contribution to resemblance in later maturity. Having been intellectually invested in adolescence shows a similar drop-off for women.

I hypothesized that planful competence should affect personality stability because adolescent competence insures a more stable network of roles and relationships over the life course. This receives only modest support, however. Table 5 shows the zero-order correlations and the standardized β 's relating personality resemblance to planful competence and three mediating variables from figure 1: educational attainment, divorce, and occupational attachment (women) or orderliness of career (men).⁸

The zero-order correlation between adolescent competence and personality resemblance over the life course is so high in the case of men that no other variable comes close to having a significant effect when competence is part of the regression equation. For women, whose adolescent competence is slightly less strongly related to personality resemblance, work attachment contributes significantly to resemblance while divorce appears to diminish resemblance, although the latter relationship is not quite significant statistically.⁹ For men, divorce has no apparent effect.

⁸ Occupational attachment is an index that combines orderliness of career with duration and steadiness of labor-force participation. For a full description see Clausen and Gilens (1990).

⁹ Divorce does significantly diminish personality continuity between senior high school and the early adult years ($\beta = -.24$, $P < .02$), and this was the period during which most divorces occurred.

TABLE 5

ORDINARY LEAST SQUARES REGRESSIONS OF PERSONALITY (SELF) RESEMBLANCE FROM ADOLESCENCE TO LATER MATURITY ON ADOLESCENT PLANFUL COMPETENCE AND INTERVENING EXPERIENCES

INDEPENDENT VARIABLES	PERSONALITY (SELF) RESEMBLANCE OVER ADULT YEARS			
	Males		Females	
	Zero Order	β	Zero Order	β
Adolescent competence.....	.72**	.67**	.46**	.53**
Educational attainment.....	.51**	.07	.15	.15
Orderly occupational career ^a.....	.40**	.11	.11	.22*
Divorced....	.01	.02	-.30**	-.17
Adjusted R ² .....		.57		.29
N		62		69

^a Values for women represent work attachment.

* $P < .05$.

** $P < .01$

Thus, apart from adolescent competence, no pathway to personality resemblance for men, and only one for women, is statistically significant.

Although work attachment and educational attainment appear to enhance personality continuity (persistent high resemblance) of women while divorce diminishes it, substituting different intervening variables modifies the regression coefficients enough to give one pause. For example, the number of children a woman raised makes no contribution to explained variance in personality continuity but reduces somewhat the contribution of both divorce and work attachment. It would appear that the normative shifts in women's roles and consciousness over the intervening years have been so great that early competence has served them less in preserving continuity of personality. The small size of the sample available for the assessment of competence and of personality change (69 women) does not permit more definitive delineation of the pathways to personality continuity or change beyond the dominant effects of adolescent competence.

There does not appear to be a significant relationship between intergenerational occupational mobility and personality change. Adolescents from the working class were less likely than middle-class adolescents to score high on planful competence, but if they did score high, they were more likely to be upwardly mobile. Those upwardly mobile men show roughly the same degree of personality stability over the life course as do competent adolescents from the middle class. The small size of the sample precludes analysis of class differences in the nature of such changes as

may occur. While planful competence in adolescence accounts for half of the variance in the men's personalities in later maturity, there are obviously many sources of influence for change in addition to the three intervening variables here examined—for example, the attributes of marital partners, military service and other adventitious events,¹⁰ changes in social contexts, and purposive shifts in interests and objectives even for persons who experience relatively stable lives.

Life Satisfaction

Only a crude index of life satisfaction was available at the time of the most recent follow-up, one derived from a "life chart," on which study members graphed the level of their life satisfaction from early childhood to the present. This was mailed to study members before they were interviewed, and roughly two-thirds mailed back completed charts. It was anticipated that interview respondents would complete the chart when the interviews took place, but time pressures precluded this. This inability to complete the chart limits the feasibility of multiple regressions using other variables that were available for only limited segments of the respondents most recently seen, such as women's occupational attainment or marital satisfaction, for example. Nevertheless, the relationships found are of considerable interest.

Women who had scored high on adolescent competence plotted their life satisfaction higher over the entire life course, on the average. Stronger than the relationship with the index of competence at ages 54–62, however, was that with the component "self-confident versus victimized" in adolescence ($r = .39$, $P < .01$). Strongest of all was the relationship between marital satisfaction (reported on a different occasion at ages 54–62) and general life satisfaction ($r = .53$, $P < .001$). Neither IQ nor educational attainment was significantly related to reported life satisfaction, again paralleling women's marital satisfaction. Women's marital satisfaction and life satisfaction were thus both strongly influenced by self-confidence and a positive orientation to meeting life's challenges in the adolescent years.

For men, on the other hand, neither the index of adolescent competence nor the component "adolescent self-confidence" predicted current life satisfaction as plotted on the life chart. Marital satisfaction was significantly associated with general satisfaction but to a lesser degree than

¹⁰ The timing of such events is itself likely to be influenced by adolescent competence. For example, men who entered military service early in World War II were described by Elder (1986) in terms that strongly connote lower adolescent competence than were late entrants.

in the case of women. However, men who had been high in adolescent competence plotted their life satisfaction at a higher level through their twenties, thirties, and forties, but not their fifties and sixties. This would seem to reflect the greater success of competent men in the earlier decades of their lives, but as retirement neared for many (and a fifth of the older group had already retired) career success did not necessarily make for greater satisfaction.

Competence and Psychological Health

At each period, the index of competence is highly correlated with a measure of psychological health developed by Livson and Peskin (1967), which consists of a composite of four clinical psychologists' ideal Q-sort profile for a "psychologically healthy person." The correlations between the index of competence and the measure of psychological health range from .74 and .79 for adolescent males and females, respectively, to .83 and .93 for males and females as of later maturity. Given the reliability of the Q-sort items, these correlations suggest that, in later years, competence and psychological health are almost synonymous. It is therefore important to note that adolescent psychological health is not nearly so powerful a predictor of educational or occupational attainment for men, number of marriages for both sexes, or marital satisfaction for women as is adolescent competence. However, adolescent psychological health vies closely with adolescent competence as a predictor of personality continuity over time. It seems obvious that the two concepts should be closely related, for poor psychological health connotes lack of self-confidence and an inability to utilize one's abilities effectively. In a multiple regression analysis with all three components, self-confidence accounts for all of the association in adolescence between competence and psychological health for males and almost all for females. But it is the combination of dependability and intellectual investment that accounts for the better prediction of men's occupational attainment and career stability and of women's marital stability.

Competence across the Life Span

A detailed analysis of the life experiences and events that led to enhancement or decline in competence over the adult years is beyond the scope of this paper. Most men and women who had scored low on adolescent competence increased their scores on all three components in the adult years, as would be expected, when they took on the roles of worker, spouse, and parent. Divorce had slight negative connotations for the later life competence ratings of both men and women, and the greater the

number of a woman's children, the more negative was the effect of child rearing on her competence in later maturity. On the other hand, strong occupational involvement enhanced both self-confidence and intellectual investment of women (Clausen and Gilens 1990).

One would not expect as high a correlation between adolescent competence and competence at maturity as was found with personality stability, for as competence generally rose with maturity, the SD of each of the components was approximately halved. Nevertheless, there was substantial continuity, especially for males. For constant samples (those seen at each follow-up), the male autocorrelations were .62 from adolescence to ages 30 or 37, .60 to ages 41 or 48, and .53 to ages 54 or 61. For women, however, the comparable correlations were consistently lower: .32 to ages 30 or 37, .29 to 41 or 48, and .32 to 54 or 61. Women's life experiences were far less under their control than were men's, and early competence led to life patterns less likely to enhance later competence.

Table 6 reveals that all but one of the components as assessed in adolescence are positively and significantly related to the total index in later maturity. The adolescent index of competence significantly predicts all later components except dependability for females (not shown in table 6). In a multiple regression, however, most of the contribution from adolescent components to competence of males in later maturity comes from "dependable." This one component is, in fact, more strongly related to later life competence than is the adolescent index; it strongly predicts self-confidence and intellectual investment as well as dependability in later maturity. It also predicts the measure of psychological health

TABLE 6

CORRELATIONS BETWEEN ADOLESCENT COMPETENCE INDEX AND INDEX IN LATER MATURITY, AND REGRESSION OF COMPETENCE IN LATER MATURITY ON COMPONENTS OF ADOLESCENT COMPETENCE

ADOLESCENT COMPETENCE MEASURE	COMPETENCE IN LATER MATURITY			
	Males		Females	
	Zero Order	β	Zero Order	β
Competence index.....	.53**	..	.32**	..
Components:				
Self-confident.....	.30**	.05	.20	.14
Intellectually invested....	.39**	.06	.25*	.16
Dependable....	.57**	.51**	.22*	.16
Adjusted R^2.....		.30		.07
N		70		79

* $P < .05$.

** $P < .01$.

in later maturity better than does psychological health in adolescence. For women, none of the components achieves significance in a multiple regression predicting competence in later maturity, though the coefficient for the composite index is significant at $P < .004$.

The meaning of my index of competence undoubtedly changes as persons become mature. Its early power reflected attributes that in adolescence connoted readiness to take on or prepare effectively for adult roles. Perhaps the most striking shift in meaning is manifest in the markedly diminished correlation between intellectual investment and dependability for both sexes (not shown in tables). In later maturity it is self-confidence that relates most strongly to dependability *and* to being intellectually invested, for both sexes, while the latter two variables are negligibly related. This helps to explain why, of the three components, self-confidence in later maturity is most strongly associated with propitious outcomes, such as men's job satisfaction and feelings about their careers, and women's marital and life satisfaction. Nevertheless, the three components of the index still appear to connote competent performance and superior interpersonal relationships in later maturity. Indeed, as noted above, in the later years the measures of competence and of psychological health appear to reflect the same concept.

Retrospective Assessments of Early Orientations

Randomly selected subsamples of 32 men and 28 women were interviewed to review their lives in 1985. Their retrospective life accounts were compared by level of planful competence assessed as of the high school years, dividing men and women into three groups of roughly 10 each, high, medium, and low in planful competence. There were few significant differences between the very small groups of men who had been high or low in planful competence in their high school years, but those that emerged are highly interesting. Those men high in early competence were more likely to report, 40–45 years later, that they had known their strengths and weaknesses while adolescent ($P < .05$), and they were much more likely to report that they had been aware of the options available to them ($P < .01$). They did not claim earlier maturity, but they less often reported severe crises in their early and middle adult years. Those who had been planfully competent were somewhat more likely to attribute the shaping of their lives to the good parenting they received, while those low in competence more often felt that their parents had failed them, though neither finding quite attains significance in these very small comparison groups. Early competence is totally unrelated to men's views of whether they have remained pretty much the same or have changed over the life course; overwhelmingly, both highly compe-

tent and less competent men see themselves as essentially unchanged through the adult years, despite the great difference in actual degree of change.

There were no significant differences in recollections of adolescence among the three groups of women classified on the basis of adolescent competence, though those who had been most competent were somewhat more likely to have thought about the qualities they would like in a marriage partner. Unlike the men, however, all but one of the women who had been highly competent in adolescence reported that they had been unaware of the options available to them. Again and again I heard variations on the theme, "I was programmed for marriage."

DISCUSSION

Before attempting to sum up the ways in which early competence tends to shape the life course, I must issue a caveat. Competence not only tends to lead to favorable outcomes and to a smoother life course, but it tends to promote continued participation in a research program that has endured for more than 50 years. No other variable predicts attrition of the sample as strongly as does adolescent competence. Among men in the top third of the ranking on adolescent competence, 93% participated in the most recent follow-up, while only 68% of those in the bottom third participated. For women, the spread was slightly less, ranging from 71% to 89%. This means that the current sample was self-selected for superior performance and the findings overstate the degree of stability in personality and careers that would be found if there had been no differentials in attrition. That said, it is equally true that the strong relationships found between early competence and later life performance might be even stronger if those lowest in adolescent competence had been retained in the sample. Fortunately, there remain in the sample a substantial number of persons who were seen in adolescence as lacking in the elements of what I have called planful competence, so we can trace the consequences of both high and low competence. The consequences of early attainment of competence are obviously related to the norms of the society and to the circumstances that each cohort faces, but I believe that the benefits of early competence will continue to accrue for adolescents making the transition to adulthood today.

Planful competence in adolescence may be considered both a measure of maturity that provides a "head start" and a measure of attributes associated with effective functioning throughout the adolescent and adult years. It is evident that planful, competent adolescents had fewer disruptions of marriage and career over the middle years than did less planful, less competent ones. They less often reported difficulties along the way

in the decade-by-decade review of their lives. The data do not support Levinson's assertion that the preadult era is "only a prelude to adult living" and that "its result is an immature and still vulnerable individual making his entry into the adult world" (Levinson 1978, p. 21). Many adolescents may have been immature and vulnerable, but many others were planful, competent, and reasonably self-assured as they looked ahead to their adult years. Those who were most mature and competent tended to assess the options available to them; they made more considered choices and they were better prepared to work through the problems of adaptation that marriage and careers require. Their competence led to superior opportunities and superior achievements. Men who were in adolescence less planful, mature, and competent had much less orderly lives. Many of these men attained mature competence in the early adult years, but others never found a job that brought lasting satisfaction or a wife with whom they could live in harmony. It was in this group that recurrent life crises most often occurred, crises due to career disruption, to marital conflict and marital dissolution, and to feelings of alienation and depression.

For the women in our sample, the concept and index of social competence was much less powerful than that for the men. Although each of the components of competence tended to be positively related to favorable outcomes, sometimes one or sometimes a pair proved to be more highly predictive than the index itself. Adolescent dependability clearly had the strongest effect on educational attainment and marital stability, but intellectual investment was the only element of the competence index that even marginally enhanced occupational achievement (with parental SES and IQ held constant) for women who entered the labor force. Adolescent self-confidence, which was strongly linked with physical attractiveness, predicted both marital satisfaction and life satisfaction more strongly than any other component. Yet when it came to the prediction of number of children borne and the prediction of personality resemblance over the adult years, the index of adolescent competence surpassed each of the separate components in the amount of variance explained. Moreover, in the later years, there is stronger coherence to the concept of competence, in that both intellectual investment and dependability are much more strongly related to self-confidence than in adolescence, despite their lesser relationship to each other.

Given the cultural norms of the 1930s and early 1940s, when our study members moved into adolescence, the differences between competence for men and for women were perhaps inevitable. When a woman's primary adult roles were marital and parental, highly competent women tended to devote themselves to those roles. Recall that one of the strongest correlates of women's adolescent competence was the number of children

they bore. Yet the rearing of children does not in itself appear to have enhanced competence as assessed here; to the contrary, in their late fifties and early sixties the number of their children proves to have no association with the index of competence. Historical shifts in values and in expected roles would lead one to expect that, for the daughters of our study members, adolescent competence would be more strongly associated with occupational attainment than with number of children. Initial analyses of data from a sample of offspring studied at ages 14–18 and again at 28–32 find this to be the case, despite a much less adequate assessment of adolescent competence. To the extent that women now have many more options and can prepare to take advantage of them, planful competence should have more payoff value than it did for their mothers.

The success of early competence in predicting long-term outcomes, including personality continuity, derives both from the greater effectiveness of competent persons and from the greater ability of competent adolescents to make choices that would serve them well in their later years. Competent men and women were better able to marshal, draw on, and maintain social support and to achieve their objectives. They received positive feedback, confirming the persons that they were. Beyond adolescence neither scheduled transitions nor adventitious life events seem to have major effects on the most salient features of their personalities, especially in the case of males. As Haan, Hartke, and Mill-sap (1985) have reported, "males generally made their own luck."

A fairly common reaction to my concept and to the evidence of stability in the lives of competent persons is to suggest that they must be dull, relatively rigid persons. The opposite is true. They are not seen as histrionic, but among the positively scored items that make up the components of competence are "arouses liking," "interesting," "values independence," "thinks unconventionally." And, at the other extreme, consider what they are *not*: fearful, distrustful, uncomfortable with uncertainty, self-defeating. Within the group that scores high on adolescent competence there is, of course, variation. Not all sail smoothly through life. And, conversely, some men and women who achieved social and emotional maturity later than their peers have been highly successful and have had enormously satisfying lives. Much remains to be done in delineating subtypes. A few of the highly competent do indeed seem rigid, as do many more of the least competent. But the competent are far more often people one would like to know.

Several sociologists have reacted to my initial presentation of these ideas by suggesting that this is primarily a psychological theory. I do not so view it. It should not be necessary to explain that humans are organisms, thinking persons, sharers of a cultural heritage that defines desired

goals, and participants in a series of negotiated roles that are part of a larger structure. That structure operates according to rules. Persons who know how to use the rules to achieve their objectives are favored, whether we are talking about academic performance, the selection of job candidates, the promotion of managers, or the utilization of health services. One's personal attributes may be valued or devalued by others. Talent and intelligence obviously come into play in negotiating life roles, and in most realms they are recognized and frequently tip the balance in selection processes.

The effects of occupational disruptions as a result of social change and economic depression, of illness and of a variety of other misfortunes, as well as the effects of movements for women's liberation and greater civil rights, can obviously diminish the predictability and stability of future lives. Chance encounters also shape our lives, but as Bandura (1982) has noted, values and personal standards mediate the effects of such encounters, as do the social milieus in which people operate. But some events and circumstances may be overwhelming. Some of the highly competent will fall by the wayside. Moreover, some persons with great abilities and talents may not manifest those talents from the start. They may make their opportunities at a later date. I do not mean to suggest that competence insures success or happiness. Indeed, there is no evidence that at the threshold of retirement those who were highly competent adolescents are happier than those who were not. They are not superior in personal warmth, but neither are they less warm. They *are* better off, and they appear to have somewhat more positive relationships with their children. On the whole, they seem better satisfied with their lives, even if the men do not score themselves higher on the life chart. They express less dissatisfaction and see themselves more positively.

Much more work is needed on sharpening the concept of planful competence and developing more adequate means of measuring it. The power of the index here utilized rests on my having had many kinds of data, secured by different methods in different situations and over many occasions. One cannot hope to have such rich data except for relatively small samples, but a combination of interviews of adolescents and their parents, inventories, and testing should make possible reliable and valid measures at far less cost than was entailed in the Berkeley studies. In addition, more thought needs to be given to the nature of competence at various age levels. The measure presented here turns out to be almost synonymous with psychological health in the later years. Featherman, Smith, and Petersen (1990) have proposed a concept of "adaptive competence" in old age that entails both rational problem solving and "reflective planning" to deal with the ill-structured dilemmas of later life. We need to delineate more precisely the facets of competence and, in particu-

lar, their sources, not merely in childhood and adolescence but in middle and old age. We need to assess the extent to which the effects of role loss in the later years may be offset by what Gove, Ortega, and Style (1989) have called the maturational perspective on aging, entailing an enhanced sense of social ease and a more thoroughly integrated self-concept in the healthy elderly.

Competence in the senior high school years is the product of the interaction of many influences. Genetic givens and the circumstances of biological development set potentials and limitations. The personalities of parents and other early caretakers, along with patterns of child rearing, strongly influence the development of the child's own personality—the ability to control impulses, to mobilize resources, and to relate to others. Preliminary analysis of the antecedents of adolescent competence finds substantial correlations with high parental demand for independence and achievement in the preadolescent years. Firm and consistent discipline and strong parental attention and support at all antecedent periods also contribute to the prediction of adolescent planful competence, even when family SES and the child's IQ are controlled for. Thus early socialization contributes greatly toward producing adolescent orientations that will permit the individual to make wise choices and to pursue them successfully not only in the transition to adulthood but for much of the life course.

APPENDIX

TABLE A1

CORRELATION MATRIX, COMPETENCE, ITS COMPONENTS, AND PRINCIPAL LIFE COURSE MEASURES FOR MALE SUBJECTS
WITH ADOLESCENT PERSONALITY DATA

Variables	1	2	3	4a	3b	3c	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Parental SES ^a																				
2 IQ at age 18	.23 ^{***}																			
3. Adolescent competencies	.56 ^{***}																			
a. Self-confidence	.83 ^{***}	.70 [*]																		
b. Intellectually invested ..	.42 ^{***}																			
c. Dependable ..																				
4. Educational attainment ^b ..																				
5 Occupational status (1943) ^c																				
6 Orderly career ^d																				
7 When sure of occupation																				
8 Age at first marriage ..																				
9 Divorced																				
10. Number of marriages																				
11 Number of children																				
12 Marital satisfaction ..																				
13 Personality resemblances from high school to thirties (1948)																				
14 Personality resemblances from thirties to later maturity (1982)																				
15 Personality resemblances from high school to later maturity (1982)																				
16 Life satisfaction (1982)																				
17 Competencies, later maturity (1982)																				
\bar{X}	53.7	122.5	39.5	3.0	-24.4	100.4	2.26	2.31	2.11	3.20	24.6	29	1.32	2.99	7.2	33	44	30	6.57	71.1
SD	24.6	12.9	54.0	35.1	46.8	50.8	1.1	1.3	1.3	1.3	4.1	46	65	1.6	1.7	27	27	29	1.9	48.9
N	90	85	92	92	92	92	70	66	66	61	63	75	71	70	62	91	68	68	37	70

^a Values are from Hollingshead education and occupation scales with signs reversed

^b Sign is reversed.

^c $P < .05$

^d $P < .01$.

TABLE A2

CORRELATION MATRIX, COMPETENCE, ITS COMPONENTS, AND PRINCIPAL LIFE COURSE MEASURES FOR FEMALE SUBJECTS
WITH ADOLESCENT PERSONALITY DATA

Variables	1	2	3	3a	3b	3c	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Parental SES ..																				
2 IQ at age 18 ..	36 ^{***}																			
3 Adolescent competences	41 ^{***}	36 ^{***}																		
a Self-confident			61 ^{***}																	
b Intellectually invested				27 ^{***}																
c Dependable				41 ^{***}																
4 Educational attainment ^a				47 ^{***}	44 ^{***}	34 ^{***}														
5 Occupational status (1967) ^a				41 ^{***}	41 ^{***}	34 ^{***}	08	-08	-24 ^{***}	-31 ^{***}	24*	19	49 ^{***}	11	41 ^{***}	04	22*			
6 Ordery career							05	-22 ^{***}	08	37 ^{***}	14	15	13	13	13	13	13			
7 Percent of years in labor force..							26	16	-02	01	01	06	31	07	19	03	42*			
8 Age at first marriage ..							13	19	-30 ^{***}	-09	-01	18	10	05	11	-07	17			
9 Divorced ..											01									
10 Number of marriages											-31 ^{***}	-33 ^{***}	-20	07	15	-02	11	18	19	
11 Number of children												32 ^{***}								
12 Marital satisfaction													-01	-09	-36 ^{***}	-24*	-30 ^{***}	08	-18	
13 Personality resemblance from high school to thirties (1948)													20	-05	-23*	-24*	-16	-16	-18 ^{***}	
14 Personality resemblance from thirties to later maturity (1947)														11	32 ^{***}	-06	16	20	-04	
15 Personality resemblance from high school to later maturity (1947)															02	11	14	54 ^{***}	42 ^{***}	
16 Life satisfaction (1947)																				
17 Competence, later maturity (1947)																				
\bar{X}	55.7	118.2	36.7	6.4	-17.9	48.2	3.04	3.31	2.99	4.4	21.5	2.4	1.38	2.75	6.8	3.5	4.4	28	6.0	60.6
SD	22.9	10.7	41.4	17.2	20.4	19.9	95	11	1.99	39	2.6	4.3	95	1.5	1.9	2.5	2.3	2.5	2.1	47.4
N ..	101	94	102	102	102	102	81	52	80	76	88	87	85	85	61	97	79	76	48	80

^a Values are from Hollingshead education and occupation scales with signs reversed

* $P < .05$

*** $P < .01$

REFERENCES

- Bandura, Albert. 1977. "Self-Efficacy. Toward a Unifying Theory of Behavior Change." *Psychological Review* 84:191-215.
- . 1982. "The Psychology of Chance Encounters and Life Paths." *American Psychologist* 37:747-55.
- Block, Jack. 1961. *The Q-Sort Method in Personality Assessment and Psychiatric Research*. Springfield, Ill.: Thomas.
- . 1977. "Advancing the Psychology of Personality: Paradigmatic Shift or Improving the Quality of Research." Pp. 37-63 in *Personality at the Crossroads*, edited by D. Magnusson and N. S. Endler. Hillsdale, N.J.: Erlbaum.
- Block, Jack, in collaboration with N. Haan. 1971. *Lives through Time*. Berkeley, Calif.: Bancroft.
- Brandstadter, Jochen. 1984. "Personal and Social Control over Development: Some Implications of an Action Perspective in Life-Span Developmental Psychology." Pp. 1-32 in *Life-Span Development and Behavior*, vol. 6. Edited by Paul B. Baltes and O. G. Brim, Jr. New York: Academic Press.
- Caspi, Avshalom, Glen H. Elder, and Daryl Bem. 1988. "Moving against the World: Life Course Patterns of Explosive Children." *Developmental Psychology* 24:824-31.
- Clausen, J. A., and Martin Glens. 1990. "Personality and Labor Force Participation across the Life Span: A Longitudinal Study of Women's Careers." *Sociological Forum* 5 (December).
- Costa, P. T., Jr., and R. R. McCrae. 1980. "Still Stable after All These Years: Personality as the Key to Some Issues in Adulthood and Old Age." Pp. 66-102 in *Life Span Development and Behavior*, vol. 3. Edited by Paul Baltes and O. G. Brim, Jr. New York: Academic Press.
- Eichorn, Dorothy H. 1981. "Samples and Procedures." Pp. 33-51 in *Present and Past in Middle Life*, edited by Dorothy Eichorn, J. A. Clausen, N. Haan, M. P. Honzik, and P. H. Mussen. New York: Academic Press.
- Elder, Glen H. 1974. *Children of the Great Depression*. Chicago: University of Chicago Press.
- . 1986. "Military Times and Turning Points in Men's Lives." *Developmental Psychology* 22:233-45.
- Erikson, Erik. 1950. *Childhood and Society*. New York: Knopf.
- Featherman, David L. 1980. "Schooling and Occupational Careers: Constancy and Change in Worldly Success." Pp. 675-738 in *Constancy and Change in Human Development*, edited by Orville G. Brim, Jr., and Jerome Kagan. Cambridge, Mass.: Harvard University Press.
- Featherman, David L., Jacqui Smith, and James G. Peterson. 1990. "Successful Aging in a Post-retired Society." Pp. 50-83 in *Successful Aging: Theory and Research*, edited by Paul Baltes and Margaret M. Baltes. London: Cambridge University Press.
- Foot, Nelson, and L. S. Cottrell, Jr. 1955. *Identity and Interpersonal Competence*. Chicago: University of Chicago Press.
- Gould, Roger. 1978. *Transformations: Growth and Change in Adult Life*. New York: Simon & Schuster.
- Gove, Walter R., S. T. Ortega, and C. B. Style. 1989. "The Maturational and Role Perspectives on Aging and Self through the Adult Years: An Empirical Evaluation." *American Journal of Sociology* 94:1117-45.
- Grotevant, Harold D., and C. R. Cooper. 1988. "The Role of Family Experience in Career Exploration: A Life Span Perspective." Pp. 231-58 in *Life-Span Development and Behavior*, vol. 8. Edited by Paul Baltes, David Featherman, and Richard Lerner. Hillsdale, N.J.: Erlbaum.
- Haan, Norma, Elizabeth Hartka, and Roger Millsap. 1985. "Development and

- Stress-related Change in Adult Personality." Paper presented at the annual meetings of the American Psychological Association, Los Angeles.
- Haan, Norma, Roger Millsap, and Elizabeth Hartka. 1986. "As Time Goes By: Change and Stability in Personality over Fifty Years." *Psychology and Aging* 1:220-32.
- Hogan, Dennis. 1981. *Transitions and Social Change. The Early Lives of American Men*. New York: Academic Press.
- Kohl, Martin. 1986. "Social Organization and Subjective Construction of the Life Course." Pp. 271-92 in *Human Development and the Life Course*, edited by Aage B. Sorenson, Franz E. Weinert, and Lonnie R. Sherrod. Hillsdale, N.J.: Erlbaum.
- Lerner, Richard, and N. A. Busch-Rossnagel, eds. 1981. *Individuals as Producers of Their Own Development*. New York: Academic Press.
- Levinson, Daniel J. 1978. *The Seasons of a Man's Life*. New York: Knopf.
- Livson, Norman, and Harvey Peskin. 1967. "Prediction of Adult Psychological Health in a Longitudinal Study." *Journal of Abnormal Psychology* 72:509-18.
- Marini, Margaret. 1984. "Age and Sequencing Norms in the Transition to Adulthood." *Social Forces* 63:229-44.
- Mayer, Karl Ulrich. 1986. "Structural Constraints on the Life Course." *Human Development* 29:163-70.
- Meyer, John W. 1986. "The Self and the Life Course: Institutionalization and Its Effects." Pp. 199-216 in *Human Development and the Life Course*, edited by Aage B. Sorenson, Franz E. Weinert, and Lonnie R. Sherrod. Hillsdale, N.J.: Erlbaum.
- Millsap, Roger, and William Meredith. 1988. "Component Analysis in Cross-sectional and Longitudinal Data." *Psychometrika* 53:123-34.
- Mischel, Walter. 1968. *Personality and Assessment*. New York: Wiley.
- Nesselroede, John. 1988. "Some Implications of the Trait-State Distinction for the Study of Development over the Life-Span. The Case of Personality." Pp. 163-89 in *Life-Span Development and Behavior*, vol. 8. Edited by Paul Baltes, David Featherman, and Richard Lerner. Hillsdale, N.J.: Erlbaum.
- Neugarten, Bernice L., J. W. Moore, and J. C. Lowe. 1965. "Age Norms, Age Constraints, and Adult Socialization." *American Journal of Sociology* 70:710-17.
- Peskin, Harvey, and Norman Livson. 1981. "Uses of the Past in Adult Psychological Health." Pp. 153-221 in *Past and Present in Middle Life*, edited by D. Eichorn, J. A. Clausen, N. Haan, M. Honzik, and P. H. Mussen. New York: Academic Press.
- Quinn, Robert, and G. L. Staines. 1979. *The 1977 Quality of Employment Survey*. Ann Arbor: University of Michigan Survey Research Center.
- Riley, Matilda White, Marilyn Johnson, and Anne Foner. 1972. *Aging and Society*, vol. 3. *A Sociology of Age Stratification*. New York: Russell Sage.
- Sewell, William H., Robert M. Hauser, and Wendy C. Wolf. 1980. "Sex, Schooling, and Occupational Status." *American Journal of Sociology* 86:551-83.
- Skolnick, Arlene. 1981. "Married Lives: Longitudinal Perspectives on Marriage." Pp. 270-300 in *Present and Past in Middle Life*, edited by D. Elchorn, J. A. Clausen, N. Haan, M. P. Honzik, and P. H. Mussen. New York: Academic Press.
- Smith, M. Brewster. 1968. "Competence and Socialization." Pp. 270-320 in *Socialization and Society*, edited by John A. Clausen. Boston: Little, Brown.
- Staw, Barry, Nancy Bell, and J. A. Clausen. 1986. "The Dispositional Approach to Job Attitudes: A Lifetime Longitudinal Study." *Administrative Science Quarterly* 31:56-77.
- Wells, L. E., and S. Stryker. 1988. "Stability and Change in Self over the Life Course." Pp. 192-224 in *Life-Span Development and Behavior*, vol. 8. Edited by Paul Baltes, David Featherman, and Richard Lerner. Hillsdale, N.J.: Erlbaum.
- Wilensky, Harold. 1961. "Orderly Careers and Social Participation." *American Sociological Review* 26:521-39.

Local Marriage Markets and the Marital Behavior of Black and White Women¹

Daniel T. Lichter
Pennsylvania State University

Felicia B. LeClere
Economic Research Service, U.S. Department of Agriculture

Diane K. McLaughlin
Pennsylvania State University

Previous research has typically ignored the spatial dimension of marriage markets, focusing instead on highly aggregated data or on individual models of entry into marriage. A basic premise of this study is that national marriage rates are played out across local marriage-market areas that define female opportunities for marriage. Using local area data from the newly released 1980 Public Use Microdata Sample (D file), the article provides a direct test of several alternative explanations of U.S. marital behavior and of black and white differences in marriage rates. The analysis reveals that (a) local economic opportunities (including welfare) for females, spouse availability, and urbanization contribute significantly to spatial variations in female marriage rates, (b) the local supply of economically "attractive" males plays an especially large role in the marital behaviors of U.S. black and white women, and (c) racial differences in marriage-market conditions accentuate, but do not explain completely, black-white differences in U.S. marriage rates. The study reinforces the view that local marriage-market conditions play a fundamental and often unappreciated role in the marital search process of American women.

Previous research on U.S. marriage markets has relied on national and other highly aggregated data (Farley and Bianchi 1987; Schoen and

¹ A preliminary version of this paper was presented at the 1989 meetings of the Population Association of America in Baltimore. The helpful comments of Clifford Clogg, Shoshana Grossbard-Shechtman, Dennis Hogan, Jay Teachman, Frank Trovato, and three anonymous reviewers are gratefully acknowledged. Requests for reprints should be sent to Daniel T. Lichter, Department of Sociology, Pennsylvania State University, University Park, Pennsylvania 16802.

Cluegel 1988; Rodgers and Thornton 1985) or has focused on individual models of "entry into marriage" (e.g., Michael and Tuma 1985; Goldscheider and Waite 1986; Marini 1978). These studies have contributed significantly to our understanding of recent U.S. patterns of marriage. Unfortunately, most have ignored the spatial dimension of the mate selection process. This is potentially problematic because spatial variation in marriage and family behavior is substantial (Farley 1988; Heaton, Lichter, and Amoateng 1989), a fact that implies that place of residence affects marital opportunities by defining the pool of prospective marital partners. Clearly, an adequate understanding of current marriage patterns requires, minimally, an explicit recognition of the local opportunity structure for marriage.

The primary objective of this study is to examine patterns of spatial variation in marriage-market processes in the United States. Specifically, we identify sources of interarea variation in marriage rates using the newly created D file of the Public Use Microdata Sample (PUMS-D) from the 1980 decennial U.S. census. This special PUMS file identifies 382 labor-market areas (LMAs) in the United States (Tolbert and Killian 1987), which we treat as marriage-market areas. By examining interarea variation in marriage patterns, we redress perhaps the most serious problem with current research on marriage markets—the implicit assumption that marriage markets are national in scope. The guiding assumption here is that, for most people, marriage markets operate at a local level where propinquity makes interaction and marriage possible.

Our focus on local marriage-market areas also provides an unusual opportunity to examine how female marriage rates are affected by local economic conditions and employment opportunities, sex-ratio imbalances, and patterns of urbanization. We have two specific objectives. First, we provide a direct test of three alternative explanations of changing marriage rates in the United States. Second, we examine sources of variation in rates of marriage for blacks and whites across U.S. marriage-market areas. To be sure, differences between African-American and white marriage markets are generally acknowledged (see, e.g., Teachman, Polonko, and Leigh 1987), but most discussions have ignored the spatial component of marriage markets—an omission we propose to remedy here.

THEORETICAL BACKGROUND AND PREVIOUS RESEARCH

In his *Treatise on the Family*, Becker (1981) likens prospective mates to single-person firms or to trading partners. Marriage occurs only if the gains from marriage are positive and partners believe they would be better off married than single. To understand patterns of marriage re-

quires some knowledge of the changing ledger sheet of benefits (e.g., children, love, and companionship) and costs (including search costs) associated with marriage. In this regard, Espenshade (1985) has provided a useful heuristic framework for evaluating U.S. marriage patterns and differences in them for blacks and whites (for applications, see Farley and Bianchi [1987]; Trovato [1988]; O'Hare [1988]). Presumably, patterns of marital and family behavior among American women are located in (1) the increased economic independence of women, (2) spouse availability (i.e., sex-ratio imbalances), and (3) modernization and urbanization. These are not true competitors but instead complement one another in a broader market-based explanation of marriage. Each can be easily subsumed within the microeconomic model of household production—the so-called new home economics (Sawhill 1977; Becker 1981).

For example, the female economic independence argument suggests that the reasons for shifts in marriage rates are largely based on women's changing economic incentives to marry (Farley and Bianchi 1987). For example, according to Becker (1981), the net gains or utility of marriage should increase with household specialization in which husbands specialize in market activities and wives in nonmarket ones. The implication is that the availability of employment opportunities for women erodes a fundamental basis for marriage; that is, economic independence affects women's decisions to "supply" marriage to the marriage market (Grossbard-Shechtman 1981; England and Farkas 1986).

This argument has provided a theoretical foil for recent studies focusing on the marital consequences of women's employment and other economic alternatives (e.g., welfare) to marriage (e.g., Bennett, Bloom, and Craig 1989; Goldscheider and Waite 1986; Preston and Richards 1975). Indeed, indirect evidence from repeated cross-sectional studies (using aggregate or national level data) is largely consistent with this hypothesis (see Espenshade 1985). Increased aggregate expenditures for public assistance (Murray 1984) and reductions in the male-female earnings and employment gaps since 1970 (Farley and Bianchi 1987) suggest that there are new alternatives to marriage for many American women. Moreover, racial differences in the relative economic independence of women may accentuate black-white differences in marital behavior. Historically, the percentage of females in the labor force has been higher among African-American women than among white women (Lichter and Constanzo 1987), and the female-male difference in earnings has been smaller for blacks than whites (Farley and Bianchi 1987; Espenshade 1985). The inference seems clear: African-American women may have lower marriage rates because the economic incentives to marry are lower than those for white women.

The shortage of prospective male partners provides a second explana-

tion of interarea variations in marriage patterns among U.S. women (Espenshade 1985; Goldman, Westoff, and Hammerslough 1984). This spouse-availability explanation has two parts—one demographic and the other economic. First, marriage rates are affected by demographic shifts in the relative supply of males and females of marriageable age (Guttentag and Secord 1983; Schoen and Kluegel 1988). When men are in short supply, opportunities to marry presumably decline for females. Sex-ratio imbalances shift the aggregate demand for marriage or the supply of potential marital partners (Grossbard-Schechtman 1984). But, at the national level, the so-called marriage squeeze caused by the maturing of the baby-boom generation seems inappropriate for explaining the continuing national retreat from marriage after 1980. Indeed, declining fertility rates in the 1960s produced a surplus of men of marriageable ages in the 1980s competing for a relatively smaller cohort of women two or three years younger. Despite relatively more opportunities for females to marry in the 1980s, there is little or no evidence of corresponding increases in female marriage rates.

Furthermore, Farley and Bianchi (1987) have reported that racial differences in availability ratios actually declined during the 1970s and 1980s, while black-white differences in proportions ever married increased. Nevertheless, racial differences in sex-ratio imbalances are extreme (reflecting higher African-American male mortality and incarceration rates) and may contribute significantly to overall racial differences in marriage and divorce in local marriage markets (Wilson 1987; Tucker and Taylor 1989; Kiecolt and Fossett 1989). Clearly, the relative demographic supply of males and females provides a potentially useful explanation of local area variation in marriage patterns. The national marriage squeezes documented by Schoen (1983) must be played out in squeezes across local geographic areas.

The economic part of the availability explanation elaborates this basic demographic premise. That is, shortages of economically attractive males may also create disincentives for marriage among females. Men's economic position affects men's "demand" for marriage and their ability to attract suitable spouses in the marriage market (Becker 1981). Wilson (1987) suggests that the shortage of black men (especially those with adequate employment) is one of the most serious structural impediments to marriage for African-American women, particularly in large cities. Indeed, Oppenheimer (1988) criticizes micro models of "entry into marriage" because they are often unrealistically based on the assumption that marriage is simply a function of women's family background and employment circumstances. Issues of spouse availability are typically ignored altogether. Oppenheimer suggests that recent patterns of delayed marriage among American women may have less to do with women's

improving economic circumstances (i.e., the women's independence argument) than with the changing economic circumstances of prospective male spouses. Data limitations have prevented most previous micro marriage studies from measuring the effects of shortages of economically attractive prospective marriage partners, a limitation we address in this study.

The final argument to be examined is one suggesting that marital behavior and family structure are linked to modernization and to the inexorable processes of urbanization and industrialization (see Hareven 1976). This is an old argument, but one not often tested empirically at the local area level. Presumably, modernization has gone hand in hand with cultural shifts away from traditional family and kinship patterns. Emphasis is placed increasingly on individualistic values and personal fulfillment (Goode 1963). Clearly, the value of children has declined, which contributes to declines in fertility and affects one of the fundamental reasons for marriage and for household formation (Becker 1981). Declines in fertility also reduce the value of nonmarket activities (for females) while at the same time eroding the advantages of household specialization and one primary motivation for marriage. Evidence of continuing rural-urban differences in marriage rates, age at marriage, and the timing of family formation is consistent with such an explanation (Hogan 1978; Heaton et al. 1989; Fuguitt, Brown, and Beale 1989). Moreover, racial differences in urbanization may be useful in explaining black-white differences in marriage rates. Blacks in the United States are disproportionately concentrated in urban areas, and black urbanization continues at a much faster rate than that of whites (Lichter, Heaton, and Fuguitt 1986). To what extent then are black-white differences in marriage simply reflective of the differences in racial concentration in large cities, with their apparently corrosive effects on traditional marital and family arrangements? To our knowledge, this question has not been tested in previous research.

Together, the three perspectives described above provide a useful conceptual framework for identifying sources of spatial variation in marriage patterns and black-white differences in the United States. Unfortunately, previous research is equivocal or provides conflicting results about the adequacy of each explanation (Trovato 1988; O'Hare 1988). In fact, past studies provide only indirect evidence for each of the various arguments discussed here. Evidence that national marriage patterns have changed systematically with national trends in sex-ratio imbalances, economic conditions, and urbanization does not provide an adequate test of these alternative explanations. The previous reliance on data at the national level or other highly aggregative data seems largely insensitive to the fact that marriage markets are local—not national—in scope (Catton 1964).

Moreover, previous studies have not adequately evaluated the merits of each perspective in a competing framework of analysis. We propose here that such an evaluation of marriage-market processes requires an explicit spatial dimension.

DATA AND MEASUREMENT

Data

The feasibility of testing the hypotheses proposed here hinges on the availability of information on geographically bounded LMAs. The PUMS-D of the 1980 U.S. decennial census (Tolbert and Killian 1987) includes an LMA geographic code for each individual in the sample. The 382 LMAs identified in this file represent multicounty units formed on the basis of commuting patterns. This data base has spawned a number of recent studies on rural and urban LMAs (e.g., Tolbert 1989; Tickamyer and Bokemeier 1988) but, to our knowledge, has not been used to identify spatially based marriage-market areas.

Hogan (1989) has argued that "marriage-market studies have rarely used employment information and have almost never considered local markets (communities) sufficiently so as to serve as adequate tests of Wilson's [1987] marriage-market thesis" (p. 45). The labor markets identified in the PUMS-D allow us to address this criticism by providing a unique opportunity to study the relationship between specific local area conditions and marriage patterns. Labor-market areas represent appropriate geographic fields of interaction for prospective marital partners. They may cross state lines, need not include an urban center, and encompass all counties and county equivalents in the United States. This inclusive feature of the LMAs represents a clear advantage over previous ecological analyses by Preston and Richards (1975) and White (1981), which were based on 1960 and 1970 census SMSA data of proportions ever married at ages 22–24. Likewise, O'Hare's (1988) ecological analysis of families headed by black females is limited to 49 metropolitan statistical areas. Clearly, which geographic scale (e.g., neighborhoods, cities, or LMAs) is most appropriate for analyzing local marriage markets is an empirical question. Our approach nevertheless has advantages over past studies using only national data or micro data sets that have typically ignored local marriage-market conditions altogether.

Despite the obvious advantages of census data for the study of marriage (see Sweet and Bumpass [1987] for discussion), only information about current marital status is available in the PUMS-D. Hence, our analyses are necessarily restricted to prevalence measures of marital behavior, such as the proportion ever married. Other sources, such as mar-

riage-registration data from the National Center for Health Statistics (NCHS), have the chief advantage of allowing the calculation of annual incidence measures. But these data have their own problems. The NCHS data are unavailable at the substate level (e.g., Schoen and Kluegel's [1988] analyses are limited to Virginia and North Carolina); therefore, they are generally ill suited for analyses of local spatially based marriage markets, such as we propose here. Moreover, not all states are part of the marriage registration areas supplying this information, which means that analyses of incidence data are necessarily less geographically inclusive than those based on the PUMS-D. Finally, because the incidence of marriage is relatively rare for certain categories of females, marriage rates may be unreliable, particularly for small geographic areas. The PUMS-D file includes approximately 2.2 million records, which allows us to aggregate individual records to the LMA level.

Measurement and Analytic Strategy

Past studies typically have measured changes or racial differences in female proportions ever married (Farley and Bianchi 1987; Preston and Richards 1975; White 1981). This prevalence measure has some desirable properties. The proportion ever married at age x , for example, is equal to the negative exponential of the cumulative first-marriage rates of females aged x (see, e.g., Preston and Richards 1975). For purposes of comparison, we likewise calculate the ever-married rate, defined at the LMA level as the proportion of ever-married women aged 20–29. In addition, we consider two other marriage rates as dependent variables. The current marriage rate is defined as the LMA proportion of currently married females aged 20–29. Our focus on young women is appropriate because, unlike older women, these women typically have been married for only a short period (thus approximating rates of incidence). We also calculate the recent marriage rate for each LMA.² These rates are computed as the proportion of women aged 20–29 who have been married less than five years. The PUMS-D includes an item on age at first marriage, which makes this computation possible. The main advantage of this indicator is that it measures recent LMA marriage rates, which can be related more closely to marriage-market conditions at the time of the 1980 census.

Our analytic strategy is to fit several weighted least squares (WLS) models of proportions ever married, currently married, and recently married, using LMAs as units of analysis. These units vary greatly in popula-

² The denominator (i.e., population at risk) is limited here to never-married women and women who first married less than five years ago.

tion size, which means that measurement error is likely to be greater in smaller than in larger LMAs. Consequently, our analysis weights each LMA by its population size, in accordance with a weighting scheme recommended by Neter, Wasserman, and Kutner (1985, pp. 363–64). On substantive grounds, weighting places greater emphasis on areas with the largest populations. Moreover, weighting is desirable on methodological grounds because it reduces the importance of high variability in smaller LMAs.

These WLS models include several indicators of local area conditions, which are defined in table 1, along with the mean and standard deviation of each. First, the economic independence argument suggests that areas with greater opportunities for female employment and higher remuneration will provide alternatives to marriage and will create fewer financial incentives for women to marry. Here, the labor-force participation rate of unmarried women aged 20–29 in each LMA provides an indicator of the extent of local female employment opportunities (and thus an alternative to marriage).³ Mean female earnings for full-time, full-year workers aged 20–29 provides a second indicator of financial independence. Presumably, as the employment opportunities and earnings of women increase within LMAs, marriage rates should decline. Finally, because it is sometimes argued that the growth of the welfare state has created disincentives for marriage (for extended discussion, see Espenshade [1985] and Wilson [1987]), we consider the effect of mean public assistance (among all women receiving assistance) on marriage rates. This indicator, used previously by O'Hare (1988), is preferred to the proportion receiving public assistance, which is affected by the local marital status composition and economic conditions.

Second, the availability-of-spouses argument suggests that interarea variation in marriage rates can be explained by (1) local area surpluses or deficits in the demographic supply of males and (2) the economic attractiveness of prospective male partners in marriage. The relative supply of males is measured by the sex ratio, defined as the ratio of males to females at ages 20–29.⁴ We expect a positive relationship between the

³ We do not use the labor-force participation rate of all women because this rate is affected directly by the marital status composition of females in LMAs, which in essence is the dependent variable that we are trying to explain. That is, LMAs with high proportions of married women are likely to have lower female labor-force participation rates simply because married women have lower participation rates than single women. We need to control for marital status in the measurement of female employment (as an indicator of female economic opportunities). We do so by restricting labor-force participation rates to unmarried women only.

⁴ Measuring the relative demographic supply of males is problematic. For example, because women typically marry men two years older than themselves, it may be appropriate to reflect this fact in our sex ratios defining relative supplies of prospective

local sex ratio and marriage rates; LMAs with male deficits should have lower rates of female marriage. In addition, as a measure of the economic attractiveness of prospective male partners, we include both the nonemployment rate and mean earnings of full-time, full-year male workers aged 20–29. Local areas with high male nonemployment rates (the nonemployed designation includes both the unemployed and those not in the labor force) and low male earnings presumably provide females with fewer opportunities for interaction with economically attractive prospective spouses. Including men not in the labor force is especially important in our race comparisons because the unemployment rate misrepresents racial differences in joblessness (Lichter 1988). Moreover, racial differences in nonparticipation rates have widened considerably over the past decade or so (Hirschman 1988).

Third, the modernization or urbanization argument suggests that inter-area variation in marriage patterns can be explained in part by the location of LMAs along a rural-urban continuum. For obvious reasons, census data do not provide completely satisfactory measures. We nevertheless consider three measures: (1) log of LMA population size, (2) percentage of population living on farms, and (3) the urban percentage in the LMA as defined by the census.⁵ We use both population size and percentage urban because some thinly populated areas (e.g., those in the Great Plains states) have surprisingly high urban percentages yet would be considered rural by almost any standard definition. These variables measure various aspects of local urbanization and, by extension, serve as proxies for spatial differences in family-related values.

Finally, we include four additional control variables in our models. The mean education of women is included as a control because education is sometimes used as proxy measure of permanent income and is expected to vary inversely with incentives to marry (Sweet and Bumpass 1987). Moreover, in our examination of the financial independence argument, it is important to evaluate the effects of female employment rates and

spouses. At the same time, any age difference cutoff is somewhat arbitrary (e.g., Should men five years older be considered prospective spouses?). In any event, some additional analysis makes the issue somewhat moot. We found that the sex ratio of men to women at age 20–29 is very highly correlated (greater than .90) with the ratio of men aged 22–31 to women aged 20–29 in LMAs. See Fossett and Kiecolt (1990) for an excellent methodological review of conceptual and technical problems associated with the use of the sex ratio.

⁵ We argue here that these urbanization variables are proxies for traditional family values or incentives (e.g., the value/costs of children) for marriage. An alternative view, drawn from theories of marital search (e.g., Oppenheimer 1988), is that large and spatially concentrated marriage-market areas will reduce the search costs associated with finding a suitable mate and thus encourage higher marriage rates. The subsequent analysis provides little support for this argument.

TABLE 1
DESCRIPTION OF VARIABLES, MEANS, AND STANDARD DEVIATIONS

Variable	Description	Mean	SD
Marriage rates:			
Ever married	Proportion of ever-married women, aged 20-29	.718	.083
Currently married	Proportion of currently married women, aged 20-29	.619	.084
Recently married	Proportion of women, aged 20-29, married less than five years*	.489	.080
Economic independence:			
Female employment	Proportion of unmarried women aged 20-29 in labor force	.776	.076
Female earnings	Mean earnings, in dollars, of females aged 20-29 working full-time, full-year	8,852	1,046
Public assistance	Mean public assistance, in dollars, of females receiving any public assistance	2,198	672
Availability of spouses:			
Sex ratio	Number of males per female at ages 20-29	.937	.095
Male nonemployment	Proportion of men aged 20-29 currently not employed	.185	.063
Male earnings	Mean earnings, in dollars, of males aged 20-29 working full-time, full-year	13,330	1,776

Urbanization.			
Log population	12.734	Natural log of population of LMA in 1980	.902
Farm	5.119	Percentage of LMA population living on farms	4.945
Urban	55.467	Percentage of LMA population living in urban areas	19.358
Other local conditions:			
Female education	12.573	Mean years of schooling completed by females aged 20-29	.472
School enrollment .....	.120	Proportion of women aged 20-29 attending school	.059
Percentage black	9.545	Percentage of black population in LMA	11.778
In-migration of currently married .....	.302	Proportion of currently married women, aged 20-29, who in-migrated in previous five-year period	.109
In-migration of recently married .....	.333	Proportion of recently married women, aged 20-29, who in-migrated in previous five-year period	.126

* The denominator or population "at risk" includes the recently married and unmarried women aged 20-29.

earnings, net of the educational composition of females in the LMAs. In addition, our models include the proportion of females aged 20–29 enrolled in school; enrollment is expected to have a negative effect on marriage rates (and on other variables in the model, such as women's employment rates). We also include the LMA percentage black because black marriage rates and proportions married are lower than those of nonblacks (Cherlin 1981; Walker 1988).⁶ As the percentage of blacks increases, the proportions ever married, currently married, and recently married are expected to decline. Finally, because local rates of marriage are potentially affected by in-migration, we include a measure of in-migration (of currently and recently married women) to control for these effects in our models.⁷ These measures of in-migration are based on the census five-year retrospective question and are defined here as LMA in-migrants between 1975 and 1980, expressed as a proportion of the LMA population in 1980 (see table 1 for a complete definition).

RESULTS

Local Marriage Markets and Female Marriage Rates

Table 2 provides the results from the WLS models of the LMA proportions ever married, currently married, and recently married. Each model, estimated from information available on 381 LMAs,⁸ explains at least 77% of the interarea variation in marriage rates for women aged 20–29. As described below, the results in table 2 shed some interesting light on sources of interarea variation in marriage patterns and illustrate the

⁶ Virtually every study of black-white differences in marriage rates is plagued by potential problems associated with the differential black undercount (Schoen and Kluegel 1988; Preston and Richards 1975; O'Hare 1988). The present study is no exception. The problem is most acute in the calculation of sex-ratio imbalances because black male undercount will exaggerate male deficits. Consequently, in our models of marriage rates we include an indicator of percentage black so that any observed sex-ratio effect is not a statistical artifact of the fact that LMAs with a high percentage of blacks will also have low sex ratios.

⁷ The inclusion of in-migration as a control variable largely removes the alternative explanation that local area variation in female marriage rates is simply a function of local areas' differences in the in-migration of married females. By including this variable, we also substantially reduce the possibility that any observed relationship between marriage-market conditions (e.g., female employment) and local marriage-market areas is due to their common association with the local in-migration of married females (i.e., that the relationship is spurious). In the end, controlling for in-migration has relatively little, if any, effect on our substantive conclusions. In-migration is not controlled in models of the ever married because the proportions ever married for migrants and nonmigrants were not statistically different.

⁸ One LMA in Arizona was eliminated because it contained a majority proportion of Native Americans and Hispanics.

TABLE 2

WEIGHTED LEAST SQUARES REGRESSION MODELS OF LMA MARRIAGE RATES OF FEMALES AGED 20-29

	Ever Married	Currently Married	Recently Married
Constant	2.136	1.599	1.143
Economic independence			
Female employment .....	.003 (.002)	-.107 (-.067)*	-.163 (-.125)***
Female earnings ^a	-.010 (-.132)**	-.015 (-.195)***	-.014 (-.223)***
Public assistance ^a	-.032 (-.230)***	-.022 (-.163)***	-.011 (-.100)**
Spouse availability			
Sex ratio .....	.048 (.032)	.060 (.043)*	.058 (.051)
Male nonemployment	-.167 (-.093)**	-.090 (-.052)*	-.123 (-.087)**
Male earnings ^a .....	.014 (.237)***	.012 (.227)***	.012 (.264)***
Urbanization			
Log population	-.030 (-.420)***	-.016 (-.228)***	-.012 (-.208)**
Farm .....	.002 (.061)*	.004 (.149)***	.004 (.184)***
Urban .....	.0002 (.048)	-.0003 (-.077)	.0002 (.018)
Other local variables:			
Female education	-.084 (-.354)***	-.055 (-.243)***	-.034 (-.181)***
School enrollment	-.193 (-.100)**	-.363 (-.195)***	-.392 (-.258)***
Percentage black	-.001 (-.139)***	-.002 (-.194)***	-.002 (-.217)***
In-migration ^b .....	...	.105 (.118)***	.115 (.173)***
Adjusted R ²	82.56	85.74	77.87

NOTE.—N = 381. Values given are metric and (in parentheses) standardized coefficients

^a In thousands of dollars.^b In-migration of the currently married is used in the model of current marriage rates, while in-migration of the recently married is used in model of recent marriage rates.* $P < .05$.** $P < .01$.*** $P < .001$.

potential significance of local marriage-market conditions in the mate selection process.

For example, the financial independence argument finds considerable support in the significant effects of female earnings and mean public assistance. As hypothesized, female earnings and mean public assistance are negatively related to each of the measures of marriage.⁹ The effect of local female employment opportunities is also negative and statistically significant in the models of proportions currently married and recently married but nonsignificant in the model of proportions ever married.¹⁰ Compared with previous research at the national level (Trovato 1988; Farley and Bianchi 1987), our WLS results at the local area level provide a considerably more direct test of the hypothesis that the improved economic and employment opportunities for women have created structural disincentives for marriage.¹¹ In sum, female marriage rates are highest in local areas that provide the fewest economic alternatives to marriage.

The argument that female marriage patterns are affected by the demographic availability of prospective male partners has only modest support in our analysis. While the sex ratio is positively related to female proportions currently married, this effect is substantively small ($b = .043$). Moreover, sex ratio imbalances are unrelated to local area proportions

⁹ Studies of the effects of welfare availability on family structure contain many methodological and interpretative difficulties, which have contributed to conflicting or ambiguous results (see Wilson [1987] for a review of this literature). Local welfare-support levels presumably affect marriage rates in two ways. High levels of public assistance (e.g., Aid to Families with Dependent Children) may depress marriage rates by causing women to choose unmarried motherhood as an alternative to marriage. Welfare availability may also make divorce or separation a viable option for married women (thus lowering the proportion of currently married women) Ellwood and Bane (1985), e.g., have produced rather consistent evidence supporting the latter interpretation.

¹⁰ One reviewer suggested that the female-gains-to-marriage hypothesis could best be evaluated by a measure of the ratio of female to male earnings. In an earlier version of this paper (Lichter, LeClere, and McLaughlin 1989), we included this variable in models of current and recent marriage rates. As expected, this earnings ratio had statistically significant and negative effects on these rates. We thank Valerie Oppenheimer for pointing out that one problem with this ratio measure is that its effect may operate through male earnings, female earnings, or both—without allowing us to tell which. Consequently, the present analysis separates this single earnings-ratio variable into its two constituent effects.

¹¹ Previous studies by Preston and Richards (1975) and White (1981) have estimated ordinary least squares regression models of proportions ever married. However, because proportions have a limited range (i.e., 0–1), standard regression techniques may inappropriately produce predicted values of marriage proportions lying outside this range. Consequently, we have estimated the models in table 2 with dependent variables transformed into logits (Cohen and Cohen 1975). The results largely reproduce the substantive conclusions we have drawn from the models reported in table 2. These results are available from the authors on request.

recently married or ever married (table 2, cols. 3 and 1). Such results imply that the recent interest in the link between sex-ratio imbalances and marital behavior may be misplaced.¹² Indeed, the results indicate that local area variations in marriage have less to do with the overall scarcity of males than with the relative scarcity of males who are economically attractive to women as potential marital partners (see the rows for male nonemployment and male earnings in table 2). For example, higher male nonemployment rates are negatively associated with all three marriage rates.¹³ Moreover, the marital effects of the men's average annual earnings are even stronger (compare standardized coefficients), exceeding the effects of women's average annual earnings.

The significance of these results is further reinforced by the fact that the increment to R^2 for the three demographic supply measures (i.e., sex ratio, male nonemployment, and male earnings) exceeds that of the three measures of female financial independence. The three male-supply variables explain an additional 14.6%, 16.1%, and 14.9% of the inter-LMA variation in proportions ever married, currently married, and recently married, respectively, when added to a model that includes all other variables listed in table 2 (data not shown). In contrast, the three female financial independence variables explain an additional 14.2%, 14.7%, and 9.7% of the R^2 of proportions ever married, currently married, and recently married, respectively. One implication seems clear: marriage rates among females may have as much to do with the economic circumstances of potential male partners as with the women's own opportunities for employment and economic independence.¹⁴

¹² Given the recent interest in sex-ratio effects (see, e.g., South and Trent 1988; Fossett and Kiecolt 1990), we were initially surprised by this result. Consequently, we also evaluated several alternative measures, none of which produced the expected positive effect on marriage. The ratio of men to women, offset by two years of age, produced results very similar to those reported here. Likewise, we evaluated the possibility of "threshold" effects (for similar strategy, see Landale [1989]). For example, the effects of a male deficit on marriage rates may not be observed unless an actual male deficit occurs (i.e., a sex ratio of less than 100) or unless the deficit is severe (i.e., a sex ratio of less than 80 males per 100 females). Our analysis of alternative thresholds, however, provided little support for the hypothesis that sex-ratio imbalances in the range found in this data greatly reduce the marital prospects of women.

¹³ Some preliminary analysis indicated the LMA unemployment rate of men had effects very similar to those reported here for the nonemployment rate.

¹⁴ We also fitted several models evaluating the effects of various alternative sex ratios that combine aspects of both the demographic and economic supply of men in local marriage markets. Each of the following supply measures, restricted to those aged 20–29, was significantly and positively associated with proportions ever, currently, and recently married: (1) ratio of men currently in the labor force to the number of women, (2) ratio of men employed full-time, full-year to the number of women, and (3) ratio of men currently in the labor force to the number of unmarried women. These measures represent variations of Wilson's (1987) "male marriageable pool index,"

The final argument, that the retreat from marriage is linked to the process of urbanization, has considerable support (see Trovato [1988] for similar conclusions using very different measures of urbanization). Although the percentage urban is largely unrelated to local marriage rates, less populated LMAs and those with high percentages of farm population evidently have relatively high marriage rates (table 2). Such results are significant on two counts. First, they reinforce long-standing arguments that urbanization and industrialization undermine traditional patterns of early and universal marriage. Second, and perhaps more important, these effects are observed independently of other local economic and demographic conditions (at least those included in our models). One interpretation, of course, is that the effects of urbanization/modernization operate primarily through changes in traditional family values instead of indirectly through changing local structural conditions typically associated with marriage (e.g., by increasing opportunities for female employment). Such an inference is clearly consistent with ideas of the continuing importance of traditional family and kinship ties in less populated agricultural areas (Landale 1989; Heaton et al. 1989).

Finally, the control variables of mean female education, school enrollment, in-migration, and percentage black affect each of the marriage rates in expected directions. It is especially noteworthy that the racial composition of LMAs affects marriage rates, regardless of local economic and demographic conditions and the extent of urbanization. This begs the question of there being local sources of interarea variation in family structure among black and white females in the United States, an issue to which we now turn.

Local Marriage Markets and Racial Variation in Marriage

In a racially stratified society such as the United States, marriage markets of African-Americans and whites operate independently for the most part (Schoen and Kluegel 1988). Consequently, a final objective is to fit WLS models of marriage rates for African-American females and white females separately. The models are similar in form to those described above, with the exception that the percentage black in the LMA is excluded. The analysis here is limited to the 104 LMAs containing the largest number of African-American females in the 20–29 age group. For comparative purposes, we also present the models of white marriage rates for all 381 LMAs. The analysis is restricted to proportions ever married and cur-

and they provide results that clearly reinforce Wilson's conclusion that local deficits of economically attractive men depress female marriage rates.

rently married because an insufficient sample size precludes the examination of proportions recently married.

The WLS models in table 3 provide two general conclusions regarding black-white differences in proportions married. First, it is clear that local conditions (at least those considered here) are much less efficacious in explaining interarea variation in black marriage patterns than in white ones. The R^2 's for blacks are 55.98 and 63.60 for the models of proportions ever married and currently married, respectively. For white females in the same LMAs, the corresponding R^2 's are 89.76 and 87.48. Such a racial difference is apparently consistent with Schoen and Kluegel's (1988) conclusion that lower marriage rates among black women are more a function of personal propensities to marry or not than of structural or marriage-market conditions that constrain marriage.¹⁵

Second, the racial differences in the effects of local marriage-market conditions on marriage rates are mostly a matter of degree rather than kind (i.e., direction). Obviously, the power of our statistical tests is reduced because of our small N (i.e., 104 LMAs), but it is reassuring that most of the regression coefficients in the models are in the expected direction. For both blacks and whites, the financial independence argument, for example, finds support primarily in the significant negative effects of welfare availability on local marriage rates. On the other hand, local female employment opportunities and earnings are largely unrelated to white marriage rates (in the racially mixed LMAs and in all LMAs). Only one of the eight coefficients is statistically significant. For African-American women, the results indicate that local female employment rates ($b = -.22$) and mean female earnings ($b = -.20$) are negatively related to proportions currently married (but unrelated to proportions ever married). Such results provide some support for the inference that the female economic independence hypothesis is more applicable to African-American women than to white women.

As with the national results (table 2), the data from racially mixed LMAs provide only modest support for the sex-ratio explanation of current marriage patterns. To be sure, the ratio of males to females is positively related, as expected, to white and black female marriage rates, but these effects are not significant when conventional statistical criteria are used.¹⁶ In contrast, the average for black male earnings is positively

¹⁵ On a methodological note, it is also clear that this racial difference is not simply an artifact attributable to the lack of interarea variability in black, local marriage-market conditions. For each of the independent variables considered here, the SD was either equal between the races or greater for blacks than for whites.

¹⁶ Although we do not want to overstate our case, the effects of the sex ratio appear to be roughly twice as large for black women as for white women. For example, in the models of current-marriage rates, the B 's are .142 for blacks and .074 for whites.

TABLE 3

RACE-SPECIFIC ESTIMATES OF MARRIAGE-MARKET EFFECTS ON FEMALE PROPORTIONS EVER MARRIED AND CURRENTLY MARRIED, AGED 20-29

	WHITE (N = 381)			RACIALLY MIXED LMAs (N = 104)		
	White			Black		
	Ever Married	Currently Married	Ever Married	Currently Married	Ever Married	Currently Married
Constant ^a	2.216	1.649	2.577	1.921	.504	.131
Economic independence						
Female employment	-.037 (-.02)	-.083 (-.05)	.072 (.03)	-.018 (-.01)	-.074 (-.08)	-.193 (-.22)*
Female earnings ^b	-.004 (-.06)	-.012 (-.16)**	.007 (.07)	.001 (.02)	-.006 (-.14)	-.010 (-.20)*
Public assistance ^c	-.038 (-.26)***	-.029 (-.21)***	-.045 (-.33)***	-.034 (-.28)***	-.046 (-.42)***	-.035 (-.34)***
Spouse availability						
Sex ratio . . . . .	.051 (.03)	.064 (.05)*	.066 (.03)	.074 (.04)	.145 (.15)	.142 (.16)
Male nonemployment	-.215 (-.12)***	-.141 (-.08)**	-.166 (-.07)	-.099 (-.05)	-.154 (-.18)	-.262 (-.33)***
Male earnings ^d . . . . .	.011 (.19)***	.011 (.21)***	.010 (.15)**	.009 (.16)***	.012 (.28)***	.011 (.29)***
Urbanization ^e						
Log population	-.029 (-.40)***	-.015 (-.22)***	-.036 (-.41)***	-.024 (-.30)***	-.022 (-.33)*	-.003 (-.05)
Farm . . . . .	.001 (.04)	.003 (.12)***	.006 (.08)	.008 (.12)	.002 (.04)	.007 (.14)
Urban . . . . .	.00002 (.01)	-.001 (-.11)*	-.0001 (-.02)	-.001 (-.12)	.0003 (.07)	-.0002 (-.05)
Other local variables						
Female education	-.087 (-.39)**	-.058 (-.27)***	-.123 (-.50)***	-.081 (-.36)***	.035 (.11)	.032 (.15)
School enrollment	-.217 (-.12)***	-.355 (-.20)***	.041 (.02)	-.245 (-.11)	-.097 (-.05)	-.077 (-.04)
In-migration ^f . . . . .		.057 (.07)*		.006 (.01)		.561 (.33)***
Adjusted R ²	82.21	83.53	89.76	87.48	55.98	63.60

NOTE.—Values given are metric and (in parentheses) standardized coefficients

^a In thousands of dollars^b In-migration of currently married women.^c $P < .05$.^d $P < .01$.^e $P < .001$.

related to local proportions of black women ever married ($b = .28$) and currently married ($b = .29$), a result consistent with Wilson's (1987) argument that the deficit of black men with good jobs depresses the marriage rates of black females. Moreover, the statistically significant negative effect of the nonemployment rate of African-American men on proportions currently married ($b = -.33$) gives additional support to Wilson's thesis. Such results suggest that the simple focus on the supply of men per se is perhaps misplaced. At the same time, the data in table 3 make it clear that this observation is also applicable to white females. Indeed, for all LMAs (table 3, cols. 1 and 2), local male nonemployment and earnings affect female marriage rates as hypothesized. For the 104 racially mixed LMAs, white women's marriage rates are significantly affected by the availability of men with higher earnings. The marital behavior of white women, like that of African-American women, is rooted (at least in part) in the local supply of economically attractive potential partners.

These racial similarities in local marriage-market effects obviously call into question marriage-market-based explanations of racial differences in marital behavior. Indeed, we cannot conclude here that black-white differences in marriage-market conditions are entirely—or even mostly—responsible for black-white differences in marriage rates. This inference is based on some additional analysis, provided in table 4, of a black-white concatenated or "stacked" file of 208 observations. Each record or unit of observation in this analysis pertains to a particular race-LMA combination.¹⁷ The model also includes a dummy indicator variable (i.e., black = 1) that identifies whether the record pertains to black or white marriage-market conditions and marriage rates. The logic of our analysis is straightforward. If black-white differences in marriage rates are due entirely to black-white differences in marriage-market op-

The standardized coefficients for the sex ratio are also much larger in the black than in the white models. An additional concern stems from the relatively high explanatory power of the black models combined with few significant coefficients. This suggests the possibility of multicollinearity. But an examination of diagnostics for the black models indicates that only the effects of women's earnings may be adversely affected by multicollinearity. Multicollinearity results in unbiased but inefficient estimators (Neter et al. 1985).

¹⁷ In other words, each of the 104 LMAs contributes two records, one containing information on African-Americans and the other on whites. Obviously, for some of the independent variables defining levels of urbanization (e.g., log of population size), both the African-American and white records for a given LMA have the same scores. In essence, by limiting analyses to 104 LMAs, we have controlled or held constant the effects of urbanization. Our analysis is thus designed to assess the effects of racial variation in female-independence variables and male-supply variables on racial differences in marriage rates.

TABLE 4

ESTIMATES OF MARRIAGE-MARKET EFFECTS ON FEMALE PROPORTIONS EVER MARRIED AND CURRENTLY MARRIED, AGES 20-29, STACKED FILE

	EVER MARRIED		CURRENTLY MARRIED	
	Model 1	Model 2	Model 1	Model 2
Constant	1.406	1.923	.704	1.469
Economic independence.....				
Female employment.....	.120 (.10)	.030 (.02)	.080 (.06)	-.046 (-.03)
Female earnings ^a	-.020 (-.22)***	-.011 (-.12)*	-.026 (-.27)***	-.013 (-.14)**
Public assistance ^a	-.041 (-.26)***	-.054 (-.34)***	-.014 (-.08)	-.037 (-.22)***
Spouse availability:				
Sex ratio.....	.271 (.23)***	.082 (.07)	.279 (.22)***	.061 (.05)
Male nonemployment.....	-.386 (-.31)***	-.122 (-.10)	-.359 (-.26)***	-.158 (-.11)*
Male earnings ^a.....	.026 (.48)***	.017 (.32)***	.023 (.39)***	.015 (.25)***
Urbanization ^c				
Log population	-.023 (-.23)**	(-.023) (-.23)***	.00003 (.00)	-.012 (-.12)
Farm .....	.009 (.11)*	.008 (.09)*	.012 (.13)**	.009 (.10)*
Urban.....	.0002 (.02)	.0003 (.04)	-.001 (-.14)*	-.0005 (-.06)
Other local variables				
Female education	-.065 (-.27)***	-.082 (-.35)***	-.032 (-.13)*	-.052 (-.20)***
School enrollment .....	.159 (.05)	.072 (.02)	-.233 (-.08)	-.165 (-.05)
In-migration ^b.....	.	.	.213 (.23)***	.031 (.03)
Black record .....	...	-.148 (-.57)***	...	-.190 (-.65)***
Adjusted R ²	81.41	86.19	83.13	88.96

NOTE.—Values given are metric and (in parentheses) standardized coefficients

^a In thousands of dollars^b In-migration of currently married women* $P < .05$ ** $P < .01$ *** $P < .001$

portunities (e.g., racial differences in sex ratios or the availability of economically attractive men), then the race-indicator variable should be statistically insignificant. The results in table 4 indicate that this is not the case.

For example, results of model 1 that pertain to LMA proportions ever married indicate that local conditions explain over 81% of the interarea variation in marriage rates. When the race-indicator variable is added in model 2, a significant increment to R^2 is achieved. Indeed, the race coefficient is larger than any other variable in the model ($b = -.57$). The metric coefficient of $-.148$ for the race-indicator variable means that the proportion of ever-married black females is .148 lower than that of white females, net of racial differences in local marriage-market conditions. Similarly, the average LMA proportion of currently married African-American women is .190 lower than that of white women (model 2 of currently married rates). By almost any definition, these are large differences. Racial differences in marriage rates occur independently of racial differences in local marriage-market opportunities or disincentives for marriage, at least for those LMA characteristics measured here. These apparently large black-white differences in marital propensities are consistent with the more spatially circumscribed results of Schoen and Kluegel (1988) for Virginia and North Carolina.

DISCUSSION AND CONCLUSION

Drawing on Becker's (1981) seminal work, our study has refocused attention on the link between local marriage-market conditions and the marital behavior of American women. Recent studies have typically concentrated on three primary explanations: the economic independence of women, deficits in the supply of marriageable men, and urbanization (Espenshade 1985). Unfortunately, analyses to date have been conducted with national or other highly aggregated data (Farley and Bianchi 1987; Schoen and Kluegel 1988; Trovato 1988) and have generated equivocal conclusions about the causes of shifting marriage patterns and black-white differences. As we have argued here, national marriage patterns are necessarily played out across local marriage-market areas. One of our guiding assumptions has been that the mate selection process operates largely at the local area level and that female marriage rates fluctuate in response to local area economic and demographic conditions. The results of our analysis have clearly supported this basic premise.

Indeed, the results have provided little basis for dismissing any of the theoretical explanations usually offered for the continuing retreat from marriage. For example, our results reinforce Farley's (1988) plea for greater geographic disaggregation in the study of marriage and family,

especially along a rural-urban continuum. Our measures of local area urbanization, which perhaps best represent the effects of changing family values in a modern society, appear to be an important part of any explanation of interarea variation in marital behavior. On the other hand, the current preoccupation with sex-ratio imbalances seems misplaced, given the relatively meager evidence presented here. Instead, our analysis has revealed that the local economic circumstances of both females and prospective male partners contribute significantly to spatial variations in patterns of marital behavior. Especially important is that the supply of economically attractive men plays an unusually large and—except for Wilson (1987)—heretofore unappreciated role in defining young women's marital prospects or incentives for marriage.

The substantive implications here are nontrivial. Our results do little to discount claims that the increasing economic independence of women has eroded a fundamental basis for marriage (Becker 1981). But our results are also consistent with the view that the marital behavior of American women has been greatly affected by the deteriorating economic circumstances of young men, whose real earnings have declined over the past decade (see Oppenheimer 1988; Bennett et al. 1989). The past emphasis on individual or micro models of female marriage (Marini 1978; Goldscheider and Waite 1986) may have been misplaced, especially in those studies that include female background and socioeconomic characteristics (e.g., employment status) in models of marital status transitions but ignore marriage-market conditions altogether. Indeed, recent research has emphasized individual choices rather than structural constraints on marriage. As Oppenheimer (1988) has suggested, delayed marriage among females may have more to do with (unmeasured) employment circumstances of prospective male spouses than with young women's financial resources. Our analysis clearly reinforces Oppenheimer's interpretation.

Racial differences in marriage and family behavior (e.g., in the prevalence of female heads of families and illegitimacy) remain a perplexing issue that defies facile explanations. Subcultural explanations, rooted largely in the black historic experience of slavery, have given way to recent arguments emphasizing the tenuous economic underpinnings of African-American family life (Walker 1988; Wilson 1987; Bennett et al. 1989) and sex-ratio imbalances (Spanier and Glick 1980; Teachman et al. 1987). We have provided some of the best local area evidence to date supporting the conclusions of Wilson (1987) and others (Testa et al. 1989; Tucker and Taylor 1989) that marriage-market conditions, especially deficits in the supply of economically attractive black men, affect the marital prospects of black women. While our data indicate that we cannot dismiss cultural explanations of black-white differences in marriage

(e.g., see table 4; also, Walker 1988), racial differences in local marriage-market conditions—especially economic conditions—clearly play a part in racially based differences in marriage. Indeed, the apparent retreat from traditional family structures may be located in black men's deteriorating employment circumstances (Hirschman 1988; Farley 1984), particularly in metropolitan central cities where over half of these young African-American men today are jobless, employed part-time, or working at poverty-level wages (Lichter 1988; Wilson and Neckerman 1986). It is difficult to minimize the significance of the apparently fragile economic underpinnings of black family life and marital behavior in the United States. At the same time, our results indicate that local economic conditions provide only a partial explanation for continuing black-white differences in marital behavior.

Finally, our prime objective has been to emphasize the spatial dimension of marriage markets, and the PUMS-D has provided a unique data source for this purpose. To be sure, marriage markets have other dimensions (e.g., the organizational context, which includes churches and clubs) that sometimes transcend spatial boundaries. But, as our study has illustrated, local marriage-market conditions nevertheless play a fundamental and often unappreciated role in the marital search process of American women.

REFERENCES

- Becker, Gary S. 1981. *A Treatise on the Family*. Cambridge, Mass.: Harvard University Press.
- Bennett, Nell E., David E. Bloom, and Patricia H. Craig. 1989. "The Divergence of Black and White Marriage Patterns." *American Journal of Sociology* 95:692-722.
- Cattton, W. R. 1964. "A Comparison of Mathematical Models for the Effect of Residential Proximity on Mate Selection." *American Sociological Review* 29:522-29.
- Cherlin, Andrew J. 1981. *Marriage, Divorce, Remarriage*. Cambridge, Mass.: Harvard University Press.
- Cohen, Jacob, and Patricia Cohen. 1975. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. New York: Wiley.
- Ellwood, David T., and Mary Jo Bane. 1985. "The Impact of AFDC on Family Structure and Living Arrangements." Pp. 137-209 in *Research in Labor Economics*, vol. 7. Edited by R. G. Ehrenberg. Greenwich, Conn.: JAI.
- England, Paula, and George Farkas. 1986. *Households, Employment, and Gender: A Social, Economic, and Demographic View*. New York: Aldine.
- Espenshade, Thomas J. 1985. "Marriage Trends in America: Estimates, Implications, and Underlying Causes." *Population and Development Review* 11:193-245.
- Farley, Reynolds. 1984. *Blacks and Whites: Narrowing the Gap?* Cambridge, Mass.: Harvard University Press.
- . 1988. "After the Starting Line: Blacks and Women in an Uphill Race." *Demography* 25 (November): 477-95.
- Farley, Reynolds, and Suzanne M. Bianchi. 1987. "The Growing Racial Difference in Marriage and Family Patterns." Research Report no. 87-107. University of Michigan, Population Studies Center.

- Fossett, Mark A., and K. Jill Klecolt. 1990. "A Methodological Review of the Sex Ratio: Alternatives for Comparative Research." Paper no. 11.08. University of Texas, Texas Population Research Center, Austin.
- Fuguitt, Glenn V., David L. Brown, and Calvin L. Beale. 1989. *Rural and Small Town America*. New York: Russell Sage.
- Goldman, Noreen, Charles F. Westoff, and Charles Hammerslough. 1984. "Demography of the Marriage Market in the United States." *Population Index* 50:5-25.
- Goldscheider, Frances Kobrin, and Linda J. Waite. 1986. "Sex Differences in the Entry into Marriage." *American Journal of Sociology* 92:91-109.
- Goode, William J. 1963. *Work Revolution and Family Patterns*. New York: Free Press.
- Grossbard-Shechtman, Shoshana A. 1981. "A Market Theory of Marriage and Spouse Selection." Paper presented at the annual meeting of the Population Association of America, Washington, D.C.
- . 1984. "A Theory of Allocation of Time in Markets for Labour and Marriage." *The Economic Journal* 94:863-82.
- Guttentag, Marcia, and Paul F. Secord. 1983. *Too Many Women?* Beverly Hills, Calif.: Sage.
- Hareven, Tamara K. 1976. "Modernization and Family History. Perspectives on Social Change." *Signs* 2:190-206.
- Heaton, Tim B., Daniel T. Lichter, and Acheampong Amoateng. 1989. "The Timing of Family Formation: Rural-Urban Differentials in First Intercourse, Childbirth, and Marriage." *Rural Sociology* 54.1-16.
- Hirschman, Charles. 1988. "Minorities in the Labor Market: Cyclical Patterns and Secular Trends in Joblessness." Pp. 63-85 in *Divided Opportunities*, edited by G. D. Sandefur and M. Tienda. New York: Plenum.
- Hogan, Dennis P. 1978. "The Effects of Demographic Factors, Family Background, and Early Job Achievement on Age at Marriage." *Demography* 15:161-76.
- . 1989. "An Entrenched Underclass." *Family Planning Perspectives* 21 (January/February): 44-45.
- Klecolt, K. Jill, and Mark A. Fossett. 1989. "Mate Availability, Economic Opportunity, and Marital Quality among Black Americans." Paper presented at the annual meeting of the American Sociological Association, San Francisco.
- Landale, Nancy S. 1989. "Marriage and Agriculture Structure." *Rural Sociology* 54:439-55.
- Lichter, Daniel T. 1988. "Racial Differences in Underemployment in American Cities." *American Journal of Sociology* 93:771-92.
- Lichter, Daniel T., and Janice A. Costanzo. 1987. "How Do Demographic Changes Affect Labor Force Participation of Women?" *Monthly Labor Review* 110 (November): 23-25.
- Lichter, Daniel T., Tim B. Heaton, and Glenn V. Fuguitt. 1986. "Convergence in Black and White Population Redistribution in the United States." *Social Science Quarterly* 67:21-38.
- Lichter, Daniel T., Felicia B. LeClere, and Diane K. McLaughlin. 1989. "Downsizing Marriage Markets: The Effects of Local Conditions on Marriage Patterns in U.S. Labor Market Areas." Paper presented at the annual meeting of the Population Association of America, Baltimore.
- Marini, Margaret Mooney. 1978. "The Transition to Adulthood: Sex Differences in Educational Attainment and Age at Marriage." *American Sociological Review* 43:483-507.
- Michael, Robert T., and Nancy Brandon Tuma. 1985. "Entry into Marriage and Parenthood by Young Men and Women: The Influence of Family Background." *Demography* 22:515-44.
- Murray, Charles. 1984. *Losing Ground*. New York: Basic.

- Neter, John, William Wasserman, and Michael Kutner. 1985. *Applied Linear Statistical Models, Regression, Analysis of Variance and Experimental Design*, 2d ed. Homewood, Ill.: Irwin.
- O'Hare, William. 1988. "An Evaluation of Three Theories regarding the Growth of Black Female-headed Families." *Journal of Urban Affairs* 10:183-97.
- Oppenheimer, Valerie Kincade. 1988. "A Theory of Marriage Timing." *American Journal of Sociology* 94:563-91.
- Preston, Samuel H., and Alan Thomas Richards. 1975. "The Influence of Women's Work Opportunities on Marriage Rates." *Demography* 12:209-22.
- Rodgers, Willard, and Arland Thornton. 1985. "Changing Patterns of First Marriage in the United States." *Demography* 22:265-79.
- Sawhill, Isabel. 1977. "Economic Perspectives on the Family." *Daedalus* 106:115-25.
- Schoen, Robert. 1983. "Measuring the Tightness of a Marriage Squeeze." *Demography* 20:61-78.
- Schoen, Robert, and James R. Kluegel. 1988. "The Widening Gap in Black and White Marriage Rates: The Impact of Population Composition and Differential Marriage Propensities." *American Sociological Review* 53:895-907.
- South, Scott J., and Katherine Trent. 1988. "Sex Ratios and Women's Roles: A Cross-national Analysis." *American Journal of Sociology* 93:1096-1115.
- Spanier, Graham B., and Paul C. Glick. 1980. "Mate Selection Differentials between Whites and Blacks in the United States." *Social Forces* 58:707-25.
- Sweet, James A., and Larry Bumpass. 1987. *American Families and Households*. New York: Russell Sage.
- Teachman, Jay D., Karen A. Polonko, and Geoffrey K. Leigh. 1987. "Marital Timing: Race and Sex Comparisons." *Social Forces* 66:239-68.
- Testa, Mark, Nan Marie Astone, Marilyn Krogh, and Kathryn M. Neckerman. 1989. "Employment and Marriage among Inner-City Fathers." *Annals of the American Academy of Social and Political Sciences* 501:79-91.
- Tickamyer, Ann, and Janet Bokemeier. 1988. "Sex Differences in Labor-Market Experiences." *Rural Sociology* 53:166-89.
- Tolbert, Charles M., III. 1989. "Labor Market Areas in Stratification Research: Concepts, Definitions, and Issues." Pp. 81-97 in *Research in Rural Sociology*, vol. 4. Edited by W. Falk and T. Lyson. Greenwich, Conn.: JAI.
- Tolbert, Charles, and Molly Killian. 1987. *Labor Market Areas for the United States*. Washington, D.C.: Department of Agriculture, Economic Research Service, Agricultural and Rural Economics Division.
- Trovato, Frank. 1988. "A Macrosociological Analysis of Change in the Marriage Rate: Canadian Women, 1921-25 to 1981-85." *Journal of Marriage and the Family* 50:507-21.
- Tucker, M. Belinda, and Robert Joseph Taylor. 1989. "Demographic Correlates of Relationship Status among Black Americans." *Journal of Marriage and the Family* 51:655-65.
- Walker, Henry A. 1988. "Black-White Differences in Marriage and Family Patterns." Pp. 87-112 in *Feminism, Children and the New Families*, edited by S. M. Dornbusch and M. H. Strober. New York: Guilford.
- White, Lynn K. 1981. "A Note on Racial Differences in the Effect of Female Opportunity on Marriage Rates." *Demography* 18:349-54.
- Wilson, William Julius. 1987. *The Truly Disadvantaged*. Chicago: University of Chicago Press.
- Wilson, William Julius, and Kathryn M. Neckerman. 1986. "Poverty and Family Structure: The Widening Gap between Evidence and Public Policy Issues." Pp. 232-59 in *Fighting Poverty*, edited by S. H. Danziger and D. H. Weinberg. Cambridge, Mass.: Harvard University Press.

Influence of the Marital History of Parents on the Marital and Cohabital Experiences of Children¹

Arland Thornton
University of Michigan

This article examines the influence of mothers' marital histories on the cohabitational and marital experiences of their children. Significant factors include whether the mother was pregnant at marriage, her age at marriage, and her experience with marital disruption and remarriage. The analysis is conducted within an event-history framework that controls for other features of the parental home, including socioeconomic status and religious affiliation. The evidence suggests that the children of mothers who married young and were pregnant at marriage entered into their own marital and nonmarital unions significantly earlier than others. The experience of parental marital dissolution increases children's nonmarital cohabitations but has little effect on their marriages. While no single causal mechanism can easily account for all of the empirical data, the combination of different attitudes toward marriage, nonmarital sex, and cohabitation can account for the empirical findings.

A growing body of research demonstrates the importance of the marital experiences of parents for their children. The intergenerational conse-

¹ This work rests on the contributions of a large number of people. Particularly important are the contributions of the mothers and children who participated in the 23-year panel study on which it is based. The interviewers, coders, and computing personnel of the Survey Research Center provided expertise and perseverance in collecting and processing the data. Ronald Freedman, David Goldberg, and Lolagene Coombs directed the early data collections while Deborah Freedman collaborated with the author in directing the later waves. Donald Camburn provided assistance in collecting the later waves of data, and Linda Young-DeMarco provided assistance in managing the data and in carrying out the analyses reported here. Blake Thornton assisted in the preparation of the tables, and Judy Baughn prepared the manuscript. Bill Axinn and Fran Goldscheider provided useful feedback on an earlier version. Funding for the data collection and analysis was provided by the National Institute of Child Health and Human Development. The author is greatly appreciative of these many excellent contributions but retains the usual responsibility for any errors. Requests for reprints should be sent to Arland Thornton, Institute for Social Research, University of Michigan, Ann Arbor, Michigan 48106.

© 1991 by The University of Chicago. All rights reserved.
0002-9602/91/9604-0003\$01.50

quences of divorce have been studied, with documented consequences that include economic deprivation, reduced educational accomplishments, reduced psychological and physical health, more rapid initiation of heterosexual relationships, and higher levels of marital instability. There is also a growing literature documenting the importance of early childbearing on the lives of the children. Theoretical explanations of the intergenerational mechanisms that transmit the effects of parental behavior to the lives of children have also grown increasingly sophisticated, although there is still room for considerable improvement.

In this article, I examine the intergenerational effects of parental marital experience on the marital and cohabitational (union-formation) behaviors of their children. The article broadens and extends our knowledge of intergenerational effects by extending the theoretical and empirical analyses of union formation in three directions. First, this analysis expands the scope of parental marital characteristics and experiences considered. While past research has focused exclusively on marital disruption and remarriage, this analysis also considers parental age at marriage and the timing of the first birth. There are important theoretical reasons for believing that these dimensions of the parental marital experience affect the union-formation experience of children, and the empirical data presented here confirm that expectation. Second, I broaden the concept of union formation from a narrow emphasis on legal marriage to a more complex definition that includes nonmarital cohabitation. The inclusion of nonmarital cohabitation in studies of union formation is useful because of the recent dramatic increase in cohabitational experiences. As the theoretical conceptualization and empirical results will demonstrate, the inclusion of cohabitation in the study of the intergenerational effects of parental marriage patterns on the union-formation experience of children provides very useful insights into the processes operating. Third, I provide an expanded theoretical framework by developing several ideas useful for linking the marital experiences of parents to the union-formation experience of their children. The intervening causal mechanisms developed include status attainment, social control, pace of maturation, the quality of the parental home environment, attitudes toward nonmarital sex and cohabitation, and attitudes toward marriage. These intervening causal mechanisms are used to develop predictions about the influence of the parental variables on children's cohabitation and marriage. Thus, I break new theoretical and empirical ground in this article by considering dimensions of parental marital history not previously considered in analyses of the effect of parents on children's union-formation behavior, by considering an important new dimension of the union-formation experience of young adults (i.e., nonmarital cohabitation), and by providing a broader theoretical framework to guide the interpretation of the data.

The empirical analyses are made possible by the availability of data from an intergenerational panel study of mothers and their children. The information about the union-formation experiences of the children was obtained from the children when they were 23 years old. The children's data were obtained using life-history calendar procedures that obtained complete marital and cohabitational histories. The data about the marital experiences of parents were obtained in a series of interviews with the mothers that covered the years the children were living in the homes of their parents.

THEORETICAL LINKAGES BETWEEN PARENTS AND CHILDREN

Because of the centrality of parental and marital roles in adult lives and children's experiences, family scholars have long theorized about the effects of premarital pregnancy, timing of marriage, and marital disruption in the lives of both parents and children (Hayes 1987; Pearlin and Johnson 1977; Hetherington 1979). This theoretical development has been accompanied by the accumulation of an extensive body of empirical evidence showing significant correlations between the marital and childbearing experiences of parents and a number of behaviors, relationships, and health outcomes for both children and adults (Hayes 1987; McLanahan 1985; McLanahan and Bumpass 1988; Glenn and Kramer 1985; Wallerstein and Kelly 1980; Thornton and Camburn 1987; Menaghan and Lieberman 1986; Hogan and Kitagawa 1985; Udry and Billy 1987). Although the causal structure underlying them remains debatable—particularly on the issue of cause versus effect (Blechman 1982; Edwards 1987)—many of the correlations are well established, and there is increasing evidence about the causal role of marital and childbearing experience (Menaghan and Lieberman 1986).

While discussion of all theoretically expected and empirically observed outcomes of parental marital history is beyond my scope here, I will first focus on a set of mechanisms that theory suggests are particularly relevant to the linkage of the courtship and marriage behavior of children to the marital histories of their parents. Where possible, I will identify mechanisms that differentially affect the entry of young adults into marital and cohabitational unions and the ways in which remarriage would modify the effect of a marital disruption. In considering these causal mechanisms it is important to note that they are neither mutually exclusive nor exhaustive. Several of them could operate to explain the effects of parental marital history on children's union-formation experience, and their effects could be interactive as well as additive. Although I primarily consider the mechanisms one at a time, I also discuss one of the more interesting combinations.

Status attainment.—Family composition and structure play a prominent role in theories of social mobility. Separation and divorce have been shown to have dramatic negative effects on the financial well-being of mothers and their children (Duncan and Hoffman 1985). Couples who marry young and with the wife already pregnant also have lower educational attainments and economic accomplishments (Hayes 1987). We also know that the socioeconomic achievements of parents have important implications for the educational attainments of children (McLanahan 1985). Lower parental resources may have a negative effect on accomplishments in elementary and high school and may reduce aspirations for college attendance. They will almost certainly have a negative effect on the ability of parents to assist their children with college expenses and will thus ultimately reduce the educational achievements of these children (Goldscheider and Goldscheider 1988).

School attendance has been identified in several theoretical models of the family-formation process as one of the major role alternatives to early courtship, marriage, and parenthood (Hogan 1978; Marini 1978; Rindfuss and Morgan 1984). By negatively affecting the school accomplishments of children, early parental marriage and marital disruption reduce one of the major factors impeding early family formation. This influence of school achievements, aspirations, and attendance on premarital sexual intercourse, premarital pregnancy, and early marriage has been documented by a number of empirical studies (Hayes 1987). These consequences of reduced children's education would be expected to lead to a higher rate of union formation among children whose parents have experienced a premarital pregnancy, early marriage, and a marital disruption. Because marriage is often seen as a more permanent and institutionalized relationship than cohabitation, educational attainment may have a stronger impact on marriage than it does on cohabitation, producing a larger effect of parental marital disruption on children's entry into marriage than on their entry into cohabiting unions.

Social control.—There are many theoretical reasons to expect a reduction in the ability of parents to influence and control their children following a marital disruption. A marital disruption halves the number of parents available for monitoring and socializing children. By its removal of a primary earner from the family, it also increases the mother's financial responsibility, which often leads to her entry into the labor force or to the extension of her hours of employment (Hetherington 1979). The mother's ability to interact with and supervise her children may be reduced by more time spent away from home. A marital disruption also weakens the abilities of parents to reinforce each other. Some scholars have theorized that separation and divorce might cause a deterioration of parent-child relations, a decrease in the respect of children for parents, and more

emphasis on relationships with peers, all of which can result in the decline of parental influence on children (Hetherington 1979; Longfellow 1979). An out-of-wedlock birth and single parenthood could also produce many of the same results. Marriage, either a first marriage following an out-of-wedlock birth or remarriage following divorce, results in the doubling of parents in the household, which would expand the opportunities for adult supervision and influence in the household. The ability of a stepparent to supervise and influence children may, however, be hampered by a lesser amount of legitimacy being associated with stepparenthood.

There are also good theoretical reasons to expect that weak parental controls over children would lead to earlier dating, earlier and more intensive heterosexual involvement, and earlier coresidential unions. As compared with parents, young people have substantially more approving attitudes toward premarital sexual intercourse and cohabitation without marriage (Thornton and Camburn 1987; Thornton 1989). Because single parents probably have a lower capacity to monitor and influence children's behavior, one would expect that a parental marital disruption would lead to more frequent premarital sexual intercourse and pregnancies among children, a relationship that has been demonstrated in the literature (Hogan and Kitagawa 1985; Thornton and Camburn 1987; McLanahan and Bumpass 1988), and to more rapid initiation of cohabiting and marital unions. Because of the continued preference of parents for marital cohabitation over nonmarital cohabitation for their children, one would expect this mechanism to influence cohabitation more than marriage.²

Earlier maturation.—Weiss (1979) suggests that two-parent families have an "echelon structure" wherein there is an implicit agreement that those on the superordinate level have authority over those on the subordinate level. With this kind of authority structure, the rights and responsibilities of children are defined differently from those of parents. This echelon structure is substantially weaker in single-parent families, and the responsibilities of children and parents are more alike. In effect, the children in a single-parent family are more like junior partners; they have additional rights and authority as well as more responsibilities and duties. The result, according to Weiss, is that children in single-parent families grow up faster, take on adult responsibilities earlier, and operate as their parents' peers at a younger age than children of stably married families. Earlier maturation and independence make it likely that children in sin-

² Marital disruption has also been shown to be associated with less social control in other areas, including cigarette and alcohol consumption and cheating on tests (Newcomer and Udry 1987).

gle-parent families will initiate heterosexual relations and enter into cohabiting and marital relations earlier.

There is a potentially important biological mechanism linking the marital histories of parents and children. Parents who marry young and are expecting a child at marriage may have matured earlier than others. Since physical development undoubtedly has a biological component, children of parents who matured early are, on average, also likely to mature more rapidly. These children could begin dating, intimate heterosexual relations, cohabitation, and marriage at younger ages themselves.

Parental home environment.—The quality of the environment in the parental home has been identified as one of the determinants of the timing of residential separation from the parental home and entry into marriage (DaVanzo and Goldscheider 1990; Goldscheider and DaVanzo 1988). Children who grow up in families living in pleasant environments with adequate standards of living, and in which parents and children are physically and mentally healthy and there are close relationships among family members, are less likely than others to rush into marital or cohabitational relationships as a means of getting away from a negative family environment.

A substantial body of research findings points to a negative association between the quality of the home environment and parental experience with early marriage, premarital pregnancy, and marital disruption. The negative effect of single parenthood on family finances has already been mentioned. Another negative effect is that the custodial parent and the children frequently need to move from the home in which they were living before the disruption of the marriage (Weitzman 1985). Such residential moves can disrupt existing networks of friends and neighbors. In many instances, the conflict between former spouses continues after the divorce, often involving the children. Marital disruption has also been shown to be related to higher levels of physical and mental illness, alcohol usage, and suicide (Menaghan and Lieberman 1986; Bloom, Asher, and White 1978).

Couples who marry young and expect a child at marriage report lower levels of marital satisfaction and substantially higher levels of separation and divorce (Furstenberg 1979; Bumpass and Sweet 1972; Thornton and Rodgers 1987). These findings indicate an overall lower quality of marital relationship, which is probably related to less positive home environments for children as well. Single parenthood has been shown to reduce the psychological well-being of children, and some of these effects appear to be very long lasting (Peterson and Zill 1986; Glenn and Kramer 1985). Marital disruption is also associated with children's antisocial behavior and difficulties in school (Newcomer and Udry 1987; Peterson and Zill

1986). These behavioral and psychological changes in a child—or in the child's siblings—may also increase strain and conflict in the family.

Attitudes toward nonmarital sex and cohabitation.—Previous research has demonstrated a substantial intergenerational transmission of attitudes toward sexual and family issues (Thornton, Alwin, and Camburn 1983; Thornton 1985; Thornton and Camburn 1987). Parents who were expecting a child at marriage have more positive attitudes toward premarital sex (Thornton and Camburn 1987) and probably more positive attitudes toward nonmarital cohabitation as well. These parental attitudes are probably transmitted to children, leading them to be more inclined to enter into cohabiting relationships.

Divorce and remarriage can modify attitudes about nonmarital sex and cohabitation. Many divorced parents reenter the courtship system in which they must deal personally and directly with issues of intimacy in nonmarital relationships. While many of the issues that parents confront as they reenter the courtship process are similar to those they dealt with before their first marriage, several important circumstances are different. First, having had substantial experience with the marital role, in which sexual relations are normative, previously married people are likely to have different views about sex the second time around. Second, there have been important long-term trends toward the acceptance of nonmarital sex and cohabitation, with marriage becoming less relevant as a legitimator of intimate relations (Thornton 1989). These trends would be particularly relevant for people reentering the courtship system. With both personal and historical changes conducive to the adoption of more approving attitudes toward sex among unmarried people, it is not surprising that such approving attitudes are more prevalent among previously married people (Thornton and Camburn 1987). Many previously married people also initiate sexually intimate relationships after their marriages have been disrupted, and their rate of nonmarital cohabitation is particularly high (Gwartney-Gibbs 1986; Bumpass and Sweet 1988).

A third difference the second time around is the frequent presence of children. As previously married parents become involved in new sexually intimate relationships and initiate cohabitational relationships, the behavior and values these represent become open information to members of the family (Webb 1988; Wallerstein and Kelly 1980). Thus, it is not surprising to find that single mothers' dating frequencies and their experiences with nonmarital cohabitation are both related to their children's sexual experiences (Moore, Peterson, and Furstenberg 1984; Inazu and Fox 1980). Also, on average, children of previously married parents are more approving of premarital sex and more sexually active themselves (Thornton and Camburn 1987).

These influences can affect children's marital and cohabitational expe-

riences in at least two ways. The increased involvement of young people in sexual relations may propel them more rapidly toward both marital and cohabitational unions, resulting in higher rates of both types of union formation. Also, the attitudinal and behavioral role models that many previously married people provide their children probably result in more approving attitudes toward nonmarital cohabitation. Consequently, it is likely that the influence of marital disruption on union-formation rates would be much more marked for cohabitation than for marriage.

Attitudes toward marriage.—There are theoretical reasons for expecting that a parental marital disruption will lead to both more personal apprehensions about marital success and more negative attitudes toward marriage as an institution (Blechman 1982). The hypothesis of more negative attitudes toward marriage among children of divorce has been supported by previous empirical research (Thornton and Freedman 1982). One would expect that these more cautious attitudes toward marriage would slow the pace of entry into marriage. Such negative attitudes toward marriage could also lead to increased cohabitation. This could happen because young people who are cautious about marriage might see cohabitation as an attractive way to ensure a lasting marriage or as a substitute for marriage.

It is likely that parents who marry young have a positive orientation toward their children's marrying young. These attitudes may be passed on to the children, leading them to marry earlier.

Summary of empirical expectations.—Most of the empirical predictions derived from this causal reasoning are direct and uniform. All six of the causal mechanisms outlined predict that parents who expect a child at marriage and married at a young age will have children with higher rates of cohabitation and marriage. In addition, five of the six explanatory factors lead to a similarly uniform prediction concerning the effects of separation and divorce: children whose parents have experienced a marital dissolution will have higher rates of union formation, both cohabitational and marital, than children of continuously married parents. The exception to the uniform prediction of higher marital and cohabitational rates among the children of divorce is the effect through attitudes toward marriage where our theoretical reasoning leads to an expectation of a lower marriage rate. Nevertheless, unless the influence of this causal mechanism is particularly strong, the overall effect of a parental marital disruption would be higher rates of cohabitation and marriage among children.

Two of the causal mechanisms, attitudes toward marriage and attitudes toward nonmarital sex and cohabitation, could result in a shift of union formation from marriage to cohabitation. By producing more positive attitudes toward nonmarital sex and cohabitation, a parental marital

disruption could cause an increase in the overall rate of union formation and encourage a shift from marriage to cohabitation. Similarly, the more negative attitudes toward marriage associated with a parental marital dissolution could cause an overall lower rate of union formation and a shift from marriage to cohabitation. The combination of more positive attitudes toward cohabitation and less positive ones toward marriage could produce a dramatic shift from marriage to cohabitation. Such a shift could result in children from disrupted marriages having higher cohabitational rates, lower marital rates, and more unions being formed by cohabitation than by marriage.

Remarriage.—For the most part, remarriage can be expected to ameliorate many of the influences of a marital disruption. When another adult is brought into the family, income should increase, social control should become more effective, and the echelon structure should be at least partially reestablished. Remarriage may also cause a diminution of negative attitudes toward marriage. Of course, the efficacy of remarriage in reducing the positive effects of parental marital dissolution on the rate of children's union formation depends largely on the relationship of the stepparent with other members of the family.

A different prediction of the effect of remarriage is provided by the mechanism of changed attitudes toward nonmarital sex and cohabitation. By definition all remarried people have entered into the courtship process and have presumably had to deal with nonmarital sexuality. Significant numbers have probably modified their earlier positions concerning premarital sex, and many have probably been sexually intimate during the new courtship process. While many of those who have not remarried have probably had many of the same experiences and shifts of attitudes as those who have, there are undoubtedly others who, being less involved in dating and courtship, have had less need to reconsider their positions on premarital sex. These considerations lead to the expectation that children of divorced parents who have remarried will have even more proclivity to marry and cohabit early than children of divorced parents who have not.

Empirical strategy.—A full empirical investigation of the theoretical ideas developed in the preceding paragraphs would require a four-part strategy: (1) investigation of the overall effects of parental marital history on children's union-formation experience, (2) investigation of the influence of parental marital history on each of the intervening mechanisms, (3) evaluation of the effect of each of the intervening mechanisms on the children's union-formation experience, and finally, (4) an evaluation of the extent to which the intervening mechanisms can account for the overall effects of the parental variables on the children's experience. Unfortunately, while the data set includes measures of some of the inter-

vening causal mechanisms used here, measures of other important intervening variables are unavailable. Also, such a full four-part evaluation of the theoretical framework would not be possible in a normal journal article. Consequently, I take a more limited approach and focus my empirical analysis on the first stage of such a full investigation—the overall influence of the marital history of parents on the union-formation experience of children. Nevertheless, while I do not include direct measures of the intervening mechanisms in the empirical analysis, the pattern of empirical results allows some indirect inferences about the importance of some of the causal mechanisms.

DATA AND METHODS

The sample.—The data I use here come from a panel study of mothers and children that used a probability sample of first-, second-, or fourth-born white children, drawn from the July 1961 birth records of the Detroit metropolitan area. Approximately equal numbers were selected from each parity group. The mothers were first interviewed in the winter of 1962, and subsequent interviews were conducted in the fall of 1962, in 1963, 1966, 1977, 1980, and 1985. The children were interviewed in 1980 when they were 18 years old and in 1985 when they were 23 years old.

The original 1962 survey interviewed 92% of the sampled mothers, and the study has maintained the cooperation of a large percentage of the families over the full 23 years. In 1985, interviews were obtained with both mothers and children in 867 families, representing 82% of the families originally interviewed in 1962.³

Marriage and cohabitation variables.—The marriage and cohabitation data were obtained through a life-history calendar, described in detail elsewhere (Freedman et al. 1988). This information was obtained monthly for the period when the participants were aged 15 through the time of the 1985 survey, which was conducted when they were between the ages of 23.5 and 24.⁴

The marriage domain was introduced with the question, "Have you ever been married?" Ever-married respondents were asked the dates of all marriages and marital dissolutions. The cohabitation domain was introduced by the question, "Have you *ever* lived together as a partner in an intimate relationship with a (man/woman) without being married to (him/her)?" For respondents who had ever cohabited, information

³ The 82% figure was calculated with the small number of deceased or seriously ill mothers and children excluded from the denominator.

⁴ All children were born in July 1961, and all interviews were conducted between February and July 1985.

was ascertained about the dates cohabiting unions began and the dates and reasons for their termination. The data-collection procedures also allowed identification of cohabiting unions subsequently transformed into marital unions.

Although the data contain complete marital and cohabitation histories, the analysis was limited to entry into first cohabitation and first marriage and the process of termination of first cohabitation. This limitation was necessary because an analysis of subsequent cohabitation and marriage for people less than 24 years old would provide a heavily selected set of individuals at risk of a second cohabitation or marriage.

A previous article (Thornton 1988) provides a detailed description of the process of entry into cohabiting and marital unions, including both age-specific and cumulative rates of union-formation experience. That analysis shows that, by the time the young women in the sample were 23.5 years old, 30% had exited single life to cohabitation and another 30% had exited single life to marriage. For men, a similar percentage had exited single life to cohabitation, but only 14% had exited to marriage. Of course, a number of those who first cohabited went on to marry. By age 23.5, 45% of the women and 24% of the men had married.

Since the young people in the study were only 23 years old at the time of the survey and only 60% of the females and 45% of the males had experienced a cohabiting or marital union, this analysis is clearly about marital and cohabitation timing and experience through that age and not about lifetime experience or ever marrying or cohabiting. The latter analysis would be interesting but is not feasible with respondents in their early twenties.

Parental marital history variables.—Premarital pregnancy status was ascertained by a comparison of birth and marriage records (Pratt 1965). This measure was coded as a dichotomous dummy variable, with one indicating pregnancy before marriage and zero indicating a probable postmarital first conception. Age at marriage is the mother's age at marriage coded in years and was treated as an interval-level variable.⁵

⁵ In preliminary analysis I examined the relationship between the union-formation variables and maternal age at marriage using a categorical specification of the age-at-marriage variable. That analysis revealed that the relationships were generally but not always monotonic throughout the range of maternal ages at marriage. The primary exception to this was that the relationships frequently flattened out at maternal ages at marriage in the middle twenties. Because of the relatively small number of cases in each of the age-at-marriage groups and the desire for a summary parameterization of the effects of age at marriage, I decided to specify the variable in a linear fashion rather than treat it as a set of dummy variables. Similar preliminary analysis suggested that the control variables of maternal and paternal education could also be summarized adequately by using an interval-level formulation.

Four categories of marital dissolution experience between 1962 and 1980 were used in the analysis. The primary distinction is between those whose parents had been continuously married and those whose parents had experienced a marital disruption. And my theoretical framework divides the latter group into those who did and did not remarry. While the timing of separation, divorce, and remarriage, if any, and the amount of time spent in each marital status might also influence children's union-formation experience, this analysis does not include these dimensions since the number of families experiencing a marital disruption was too small for further meaningful subdivision. The fourth category consists of families who had experienced the death of one of the parents. Again, sample size prevents further subdivision of the widowed group; this inability to distinguish between those who did and did not remarry limits the theoretical predictions concerning widowhood.

Control variables.—I used three control variables in the analysis in order to minimize the chance that observed relationships were spurious in the sense that they were produced by other variables. The father's and mother's educations were two of these, with the father's education being measured in 1962 and the mother's in 1980.⁶ Both were treated as interval-level variables. The third control variable was the child's religious affiliation in 1980. Five religion categories were used: Catholic, nonfundamentalist Protestant, fundamentalist Protestant or Baptist, other, and none. The five categories were converted to four dummy variables with nonfundamentalist Protestants treated as the reference group.

In addition to including these three control variables in the multivariate equations, I analyzed all of the parental variables simultaneously in the same equations. Thus, the difference between the bivariate and multivariate effects of any parental marital variable reflects the effects of the other parental marital variables as well as the variables entered exclusively for control purposes. Of course, I do not claim that this set of control variables is exhaustive of all factors that might influence both the parents' and children's union-formation experiences.

Methods.—I used continuous time-hazard models. The specific event-history technique used is the proportional hazards model first developed by Cox (1972; see also Namboodiri and Suchindran 1987 and Teachman 1983). This model has the advantage of allowing the form of the hazard

⁶ The inclusion of maternal and paternal education in the analysis provides at least a partial control for the socioeconomic position of the family. In a preliminary analysis family income was also controlled. Family income, however, had only a modest effect on the children's union-formation experience, and its inclusion in the analysis had only a very slight effect on the estimated parameters of the other independent variables.

curve to remain unspecified but also the disadvantage of requiring that differences in hazards be proportional across time. A preliminary analysis checked the possibility that the effects of the predictor variables were not the same across different ages. This analysis revealed no consistent, large, or easily interpreted interactions of the effects with age, providing confidence in the assumption that the effects were proportional across time. This finding also suggests that the substantive effects of the parental variables were quite uniform across the life course.

The hazard or rate of marriage or cohabitation can be written as $h(a) = h_0(a) \times \exp(B_k Z_k)$, where $h(a)$ is the rate of cohabitation or marriage, $h_0(a)$ is an underlying baseline rate, Z_k is the explanatory variables included in the equation, and B_k is the effect parameters associated with the explanatory variables (Namboodiri and Suchindran 1987; Teachman 1983). In the model the underlying hazard rate, $h_0(a)$, is not estimated but is adjusted multiplicatively by the effects of the predictor variables. In order to facilitate interpretation of results, in the tables I report $\exp(B_k)$, which can be interpreted as the amount that the underlying hazard is multiplied for each unit change in the explanatory variable (Namboodiri and Suchindran 1987; Teachman 1983). Also the percentage change in the underlying hazard associated with each unit of change in the explanatory variable is equal to $100(\exp[B] - 1)$.

RESULTS

Since the union-formation process can be very complex when both cohabitation and marriage are taken into account, several aspects of the process were considered in the analysis. I first consider the total union-formation rate, which represents entry into either cohabitation or marriage and ignores the distinction between the two. This analysis indicates the extent to which parental marital history influences the overall union-formation process. A second analysis disaggregates the process and focuses on the two types of union formation separately, treating cohabitation and marriage as competing risks terminating the single state. This analysis permits separate evaluation of the influence of parental marital history on marriage and cohabitation. In the marriage analysis, people who entered a cohabiting relationship were treated as censored, while people who married were treated as censored in the cohabitation analysis. The comparison of cohabitation and marriage was further enhanced by an analysis of the choice between cohabitation and marriage as the first union. This was accomplished by including in the analysis only people who had either cohabited or married and then seeing whether the first union was cohabitation or marriage. Since the dependent variable here was a simple

dichotomy, the statistical procedure was switched from hazard analysis to logit regression.

Since cohabitation is frequently followed relatively quickly by marriage, a third analysis focused on the total rate of marriage, ignoring whether or not cohabitation had occurred earlier. This analysis permits evaluation of the effect of the parental variables on the overall rate of marriage. Persons who had not married before the 1985 interview were treated as censored at the time of the interview. The investigation of the importance of cohabitation as a route to marriage was also supplemented by a logistic regression analysis that included only people who had married and examined whether cohabitation had preceded the marriage. This permits analysis of the effect of the parental variables on cohabitation as a pathway to marriage. A fourth analysis shifts the focus specifically to the determinants of the outcome of cohabitation. Here the analysis is limited to those who first cohabitated and examines the rate of subsequent entrance into marriage, allowing determination of whether the same factors that influence entrance into cohabitation and marriage directly also influence the marital behavior of those who first cohabited.

Total union formation.—In table 1, I document the effects of the explanatory variables on the total union-formation rate. All three maternal history variables have substantively important and statistically significant effects. The general pattern of relationships is very similar for males and females, with the combined data for males and females adequately representing the relationships for both. In the multivariate analysis, children whose mothers were pregnant at marriage had a union-formation rate that was 44% higher than those whose mothers were not. The total union-formation rate of children also was reduced 6% for each additional year of age at marriage for mothers. This multivariate effect implies that the union-formation rate for children whose mothers married at the age of 24 would be 31% lower than for children whose mothers married at the age of 18. The union-formation rates for children whose mothers were divorced but not remarried were 44% higher than the rate for children in stably married families.⁷ And the rate for children whose mothers had divorced and remarried was 90% higher than the rate for children of stably married mothers. Thus, a young age at marriage, a premarital pregnancy, and a marital dissolution in the older generation clearly increase the rate of early union formation in the younger generation.

Entering cohabitation and marriage from the single state.—The effects of parental marital history on the two types of union formation are docu-

⁷ Although the effect parameter is similar for males and females, the parameter is only statistically significant for males.

TABLE 1

THE EFFECTS OF PARENTAL MARITAL HISTORY ON CHILDREN'S FIRST UNION FORMATION, IGNORING WHETHER THE UNION WAS MARRIAGE OR COHABITATION, BY GENDER AND FOR MALES AND FEMALES COMBINED

PREDICTOR VARIABLES	FEMALES (N = 432)		MALES (N = 426)		TOTAL (N = 858)	
	Zero-Order Model ^a	Multivariate Model	Zero-Order Model ^a	Multivariate Model	Zero-Order Model ^a	Multivariate Model
Prenatal pregnancy	1.52**	1.35*	1.96**	1.58**	1.69**	1.44**
Age at marriage .....	.91**	.95**	.89**	.95*	.90**	.94**
Marital disruption: ^b						
Widowed.....	1.55*	1.67*	1.43	1.68	1.50*	1.57*
Divorced and remarried.....	2.61**	2.25**	2.10**	1.53*	2.39**	1.90**
Divorced and not remarried	1.45	1.38	1.58*	1.54*	1.51**	1.44**
Religion: ^c						
Catholic.....		.74*	...	1.04	...	.85
Fundamentalist or Baptist.....	...	.96	...	1.85*	...	1.20
Other .....	...	.68	...	.82	...	.73
None.....	...	.97	...	1.12	...	.99
Mother's education .....	...	.95	...	.88**	...	.93**
Father's education .....	...	.97	...	.97	...	.96
Child's gender (female) .....	...	...	...	..	...	1.50**
χ^2 .....	...	50.08	...	59.15	...	118.55
df .....	...	11	...	11	...	12

NOTE.—The effects shown here represent the multiplicative shift in the underlying rate associated with one unit change in the predictor variable. Cohabitation and marriage are treated as identical events in this table; i.e., the definition of an event and its timing are determined by either cohabitation or marriage.

* Each variable is entered into the equation by itself for the female and male analysis. For the total analyses each variable is entered with only the gender variable.

^b The omitted category is continuously married.

^c The omitted category is nonfundamentalist Protestant.

* $P < .05$.

** $P < .01$.

mented separately in table 2. Maternal age at marriage and premarital pregnancy status influence both marriage and cohabitation rates, and the direction and magnitude of the parental effects on children's marriage and cohabitation rates are very similar. For example, the multivariate models for the total sample indicate that a maternal premarital pregnancy is associated with a 46% higher cohabitation rate and a 40% higher marriage rate. Similarly, each additional year of maternal age at marriage is associated with a 6% reduction in both the cohabitation and marriage rates. Thus, these data provide compelling evidence that maternal age at marriage and premarital pregnancy status have powerful and similar effects on the rates of entry into both marital and cohabitating relationships.

A very different story emerges for the effects of maternal marital disruption. While all groups of young adults who have experienced a parental marital disruption have remarkably higher rates of cohabitation, they do not have higher rates of marriage. The multivariate cohabitation model for the total sample indicates that a parental marital disruption is associated with at least a doubling of the cohabitation rate, whereas the estimated effects in the marriage model are not statistically significant and vary across groups. Thus, a parental marital disruption increases cohabitation rates dramatically but has no definite effect on the marriage rate.

Comparing marriage and cohabitation.—The analysis summarized in table 2 suggests that maternal age at marriage and premarital pregnancy status have similar effects on cohabitation and marriage. That is, neither maternal variable provides a differential impetus for young adult children to choose either cohabitation or marriage over the other. This impression was confirmed by an analysis using logistic regression that included only young adults who had experienced a union formation and that examined the choice between cohabitation and marriage. The multivariate analysis demonstrated that the effects of these two variables on the choice between marriage and cohabitation were small and statistically insignificant (not shown in tables).

The data, however, demonstrate a substantial effect of maternal marital disruption and remarriage on whether children's union-formation experience begins with marriage or cohabitation. In an analysis of young adults who had either married or cohabited, half of the children reared by continuously married parents entered a legal marriage in their first union experience, whereas the percentages for the three groups of children experiencing a marital disruption ranged from only 20% to 27%. A multivariate logistic regression analysis of this issue (including all the predictor variables of table 2) confirmed that growing up in a family that has experienced a marital disruption produces a substantial and

TABLE 2

THE EFFECTS OF PARENTAL MARITAL HISTORY ON CHILDREN'S FIRST COHABITATION AND FIRST MARRIAGE, TREATING THE TWO UNION-
FORMATION TYPES AS COMPETING RISKS, BY GENDER AND FOR MALES AND FEMALES COMBINED

PREDICTOR VARIABLES	FEMALES			MALES			TOTAL	
	Zero-Order Model ^a	Multivariate Model		Zero-Order Model ^a	Multivariate Model		Zero-Order Model ^a	Multivariate Model
A. Cohabitation:								
Premarital pregnancy.....	1.61**	1.45*		1.85**	1.48*		1.72**	1.46**
Age at marriage.....	.91**	.94		.87**	.95		.89**	.94**
Marital disruption: ^b								
Widowed.....	2.79**	3.15**		1.75	2.01*		2.23**	2.30**
Divorced and remarried ..	4.00**	3.26**		2.87**	2.06**		3.38**	2.60**
Divorced and not remarried.....	2.45**	2.22**		2.32**	2.19**		2.38**	2.19**
Religion: ^c								
Catholic.....	...	77		...	.99		...	89
Fundamentalist or Baptist.....	...	.93		...	2.04*		...	1.35
Other.....	...	65		...	1.15		...	.89
None.....	...	1.17		...	1.47		...	1.34
Mother's education.....	...	1.01		...	.90		...	.96
Father's education ..	...	1.00		...	.96		...	.97
Child's gender (female).....	...	...		...	...		...	1.05
N ..	432	432		426	426		858	858
χ^2.....	...	44.32		...	56.37		...	88.16
df.....	...	11		...	11		...	12

B Marriage:

Prenatal pregnancy.....	1.44*	1.27	2.26***	1.91*	1.64**	1.40*
Age at marriage.....	.92**	.94*	.91*	.95	.92**	.94**
Marital disruption: ^b						
Widowed.....	67	67	88	1.04	.75	.79
Divorced and remarried.....	1.64	1.48	.77	.58	1.35	1.15
Divorced and not remarried.....	.77	.78	.32	.35	.61	.64
Religion: ^c						
Catholic.....		71	...	1.10	...	.81
Fundamentalist or Baptist.....	...	1.01	...	1.44	...	1.08
Other.....	...	.70	...	...	...	.52
None.....	...	.69	...	.21	...	.43
Mother's education.....	...	.90*	...	.83*	...	.89**
Father's education.....	...	94	...	1.00	...	.96
Child's gender (female).....	...	...	...	...	...	2.50***
N.....	432	432	426	408 ^d	858	858
χ^2.....	...	28.90	...	24.21	...	89.45
df.....	...	11	...	10	...	12

NOTE.—For definition of effects see first note to table 1. In the marriage analysis, cohabitation is treated as censored. In the cohabitation analysis, marriage is treated as censored.

* For definition of zero-order models, see table 1, n.s.

^b The omitted category is continuously married.

^c The omitted category is nonfundamentalist Protestant.

^d In the multivariate marriage analysis for males, people with "other" religious affiliations are excluded because none of them married, which prevented the estimation of an effect parameter for them.

* $P < .05$.

** $P < .01$.

statistically significant decrease in marriage as compared with cohabitation (data not shown in tables). Clearly a parental marital disruption has an effect on the relative experience with marriage versus cohabitation, a conclusion that I will return to later.

Entry into marriage when cohabitation is ignored.—While the data presented in table 1 and 2 document the effects of parental marital history on the total union-formation rate and the rates of exiting single status for cohabitation and marriage, they do not allow evaluation of the total effects of these parental variables on marriage. This examination requires looking at first-marriage rates, ignoring whether cohabitation preceded the marriage. This analysis is summarized in table 3. Both maternal age at marriage and premarital pregnancy have substantial, statistically significant effects on the overall marriage process. The rate of first marriage, ignoring cohabitation, is significantly higher for those whose mothers married young and were pregnant at the time of their marriage. Furthermore, the magnitudes of these effects are very similar to the magnitudes of the effects of these two variables on the other rates already examined, which suggests that a maternal premarital pregnancy and a young maternal age at marriage provide a fairly uniform positive stimulus to all dimensions of union formation.

The differences among the marriage rates for children whose mothers had been continuously married, widowed, or divorced and not remarried were neither particularly large nor statistically significant. However, the overall marriage rate of children whose mothers had been divorced and remarried was significantly higher than the rate of the stably married group. It appears, however, that the effect of maternal remarriage holds primarily for daughters and not for sons.

A comparison of the effects of maternal marital history on marriage in a single-decrement framework (table 3) with those effects on marriage in a competing-risks framework (table 2) reveals a useful insight. The rate of marriage for children whose mothers had experienced a marital disruption was generally higher relative to the marriage rate for children with continuously married parents when marriage was studied in a single-decrement framework (table 3) than when it was studied in a competing-risks framework (table 2). Some numbers from the multivariate models for the total sample will illustrate this point. In the competing-risks framework, the marriage rate for children in the divorced and not remarried group was 36% lower than the rate for children of continuously married mothers, whereas their rate was only 9% lower when the overall marriage rate was examined. The differential for the divorced and remarried group increases from a positive 15% to a positive 51% when the dependent variable is shifted from marriage in a competing-risks framework to a framework in which cohabitation is ignored.

TABLE 3

THE EFFECTS OF PARENTAL MARITAL HISTORY ON CHILDREN'S FIRST MARRIAGE, IGNORING COHABITATION,
BY GENDER AND FOR MALES AND FEMALES COMBINED

PREDICTOR VARIABLES	FEMALES		MALES		TOTAL	
	Zero-Order Model ^a	Multivariate Model	Zero-Order Model ^a	Multivariate Model	Zero-Order Model ^a	Multivariate Model
Premarital pregnancy.....	1.39*	1.21	2.03**	1.49*	1.57**	1.28*
Age at marriage.....	.91**	.94**	.88**	.94*	.90**	.93**
Marital disruption: ^b						
Widowed ..	1.06	1.12	.69	.70	.93	.95
Divorced and remarried ..	2.14**	1.84**	1.48	1.04	1.90**	1.51**
Divorced and not remarried ..	.98	.94	.89	.85	.95	.91
Religion: ^c						
Catholic ..	...	.73	...	1.07	...	.83
Fundamentalist or Baptist ..	...	1.05	...	1.21	...	1.10
Other ..	...	.66	...	...	...	.47
None ..	...	.91	...	.96	...	.87
Mother's education ..	...	.90**	...	.89	...	.90**
Father's education ..	...	.98	...	.95	...	.96
Child's gender (female) ..	...	...	...	...	...	2.21**
N ..	432	432	426	408 ^d	858	858
χ^2 ..	...	42.69	...	27.30	...	115.92
df ..	..	11	..	10	..	12

NOTE.—For definition of effects see first note to table 1. Experience with cohabitation is ignored in this table. Only formal marriage is included as an event to be analyzed.

^a For definition of zero-order models see n. 2, table 1.

^b The omitted category is continuously married.

^c The omitted category is nonfundamentalist Protestant.

^d Table 2, n. d explains a restriction of the sample for the multivariate analysis of the marriages of males.

* $P < .05$.

** $P < .01$.

This pattern, together with other data presented earlier, suggests quite a different process of entry into marriage among children who had experienced a childhood parental marital disruption from children whose parents had been continuously married. Growing up in a home in which there has been a marital disruption results in a relative shifting of the union-formation process from entering marriage directly from the single state to entering marriage indirectly through cohabitation. It clearly increases the rate of direct entry into cohabitation (table 2) and increases the relative preponderance of direct cohabitation entries relative to direct marital entries. However, many children of disrupted marriages who cohabit also go on quite rapidly to enter marital unions. Consequently, the overall rate of marriage of children who have experienced a parental marital disruption is not appreciably lower than the rate for children who have not. And, for children whose mothers divorced and remarried, this process (of marriage preceded by cohabitation) results in a substantially higher overall rate of marriage than for children whose parents had been continuously married (table 3).

Cohabitation experience of those who married.—The cohabitation experience of those who married further highlights the differences in paths to marriage. Of the children who had married by the time of the 1985 data collection, 29% of those with continuously married parents had cohabitated before the marriage, whereas, for the three groups of children who had experienced a parental marital dissolution, between 54% and 62% had cohabited before marrying. A multivariate logistic regression analysis of whether marrying couples had previously cohabited (containing all the variables listed in table 3) confirmed that the effect of a parental marital disruption was both substantial and statistically significant (data not shown in tables).

Marriage rates of cohabiting couples.—I also wanted to know whether the dimensions of parental marital history that explained entry into cohabitation and directly into marriage also explained the marital behavior of those who first cohabited. I accomplished this by limiting the analysis to young persons whose first union experience was cohabitation without marriage and analyzing two rates: (1) the rate of marrying the cohabiting partner and (2) the rate of marrying anyone. The second rate includes both marriages to the first cohabiting partner and marriages to someone else following the dissolution of the cohabiting relationship. Both variables were defined in terms of time since the initiation of the first cohabitational experience. In order to provide a sufficient number of cases for analysis, I combined the three marital dissolution groups into one category.

Two of the three variables, parental premarital pregnancy status and experience with a marital dissolution, had no statistically significant ef-

fects on marriage following cohabitation for either men or women (data not shown in tables). The third variable, the mother's age at marriage, however, did have an important effect for women, although not for men. In the multivariate analysis for women, every additional year of the mother's age at marriage was associated with a 9% decrease in the rate of marrying the partner and a 10% decline in marrying anyone (including the partner), and both differences are statistically significant at the .10 level. This effect suggests that, at least among women, there is a pervasive effect of young maternal marital timing on the rapidity of entry into unions, and this effect operates to increase marriage rates even among those who are already cohabiting.

Remarriage of mother.—Although the data presented earlier document the relative effects of divorce followed by remarriage with divorce not followed by remarriage, the structure of the equations in those tables does not allow estimation of sampling variability and statistical significance of the *differences* between the remarried and not remarried groups. I calculated those parameters by reestimating the equations using the divorced and remarried group as the omitted category (data not shown).

For females, the differences between having a divorced and remarried mother and having a divorced mother who has not remarried are consistent and striking. In every comparison the union-formation rate for the daughters of remarried mothers is higher than for those whose mothers had not remarried: for the total union-formation rate the relative difference was 1.63 (table 1); for cohabitation it was 1.47 (table 2); for marriage in a competing-risks framework it was 1.90 (table 2); and for marriage with cohabitation ignored it was 1.96 (table 3). Only the last difference was statistically significant at the .05 level using a two-tailed test, while the first and third differences were significant at the .10 level. For males, differences between the two groups were inconsistent and relatively small when compared with their sampling variability.

CONCLUSIONS AND DISCUSSION

The empirical evidence I have examined here provides considerable support for the general theoretical idea motivating this research. The union-formation experiences of young adults are influenced to a dramatic extent by the marital experiences of their parents. Parental age at marriage, experience with premarital pregnancy, and marital disruption and remarriage all influence the process of entry into cohabiting and marital unions.

Maternal age at marriage and premarital pregnancy.—The effects of maternal age at marriage and premarital pregnancy on children's union formation are substantial and similar for both marriage and cohabitation. Children whose mothers married young and were pregnant at marriage

enter into cohabitational and marital unions at a substantially higher rate than other children. The effects of these two factors are similar for both marriage and cohabitation. Furthermore, among women, the consistent effect of maternal age at marriage extends even to the decision to marry after entry into a cohabitational union.

Several causal linkages were posited to connect a young maternal age at marriage and premarital pregnancy status to children's union-formation experience. These include theories about the lower status attainment of children, the quality of the parental home environment, the pace of maturation, and attitudes toward marriage and nonmarital sex and cohabitation. Direct examination of these causal mechanisms was beyond my scope here, and the pattern of results provided little help in evaluating their relative importance. Additional research is needed concerning these causal mechanisms and the ways they transmit the effects of parental experience to the union-formation behavior of their children.

Marital dissolution and remarriage.—The influence of a parental marital disruption on children's union-formation experience is both substantial and complex. A childhood parental marital disruption substantially increases the overall rate of leaving the single state for a union and shifts the first union experience away from marriage and toward cohabitation. The result is that the pathway to marriage differs significantly for children who have experienced a childhood marital disruption and those with continuously married parents; children who have experienced a childhood marital dissolution are much more likely than others to cohabit before marriage. There is also a tendency for parental remarriage to increase the higher rate of union formation among children even further, with this effect being more marked for young women than for young men.

Although direct tests of the theoretical mechanisms posited to explain the effects of parental marital dissolution and divorce are beyond the scope of this article, indirect evaluations are possible because there are some important differences in the predictions that the various theories make about the pattern of effects. Comparisons of the predictions from the different theoretical models with the patterns in the empirical data provide a means for evaluating the relative usefulness of the different mechanisms.

Five of the six theoretical mechanisms—status attainment, social control, earlier maturation, parental home environment, and attitudes toward nonmarital sex and cohabitation—correctly predict the positive influence of a parental marital dissolution on the cohabitation rate. However, these same five mechanisms also predict a positive effect of a parental marital disruption on the marriage rate, a prediction that is clearly

contrary to the empirical data. The lack of a positive effect on marriage is especially problematic for the status-attainment mechanism because there are reasons to believe it would affect marriage even more than cohabitation. The negative implications of the lack of an effect of parental marital disruption on children's rate of entry into marriage are least severe for social control and attitudes toward nonmarital sex and cohabitation because these two mechanisms suggest more of an effect on cohabitation than on marriage. In these two cases, the strong effect on cohabitation could be contributing to a relative shift from marriage to cohabitation.

The theoretical predictions of the attitudes-toward-marriage mechanism are particularly important here. This is the only mechanism identified that does not predict a higher rate of exiting the single state for marriage among those whose parents have experienced a marital disruption. In fact, it makes the opposite prediction—that children who have experienced a parental marital disruption may actually have lower rates of exiting the single state for marriage.

Only one of the theoretical mechanisms is able to account for the effect of a parental remarriage on the rate of children's union formation: attitudes toward nonmarital sex and cohabitation, which predicts that a remarriage would increase rather than reduce the positive union-formation effect of a marital dissolution. The other causal mechanisms suggest that a maternal remarriage might even ameliorate the effects of the original disruption, and the data are clearly inconsistent with this expectation.

This review of the correspondence of the empirical results with the various theoretical mechanisms suggests that the most promising single theoretical mechanism may be the one focusing on the influence of a parental marital dissolution on attitudes toward premarital sex and cohabitation. This mechanism correctly predicts the positive effect on cohabitation and suggests that the effect on cohabitation would be stronger than the effect on marriage. This mechanism also correctly predicts the increased positive effect on union-formation rates associated with a parental remarriage. The one shortcoming of this explanation is its prediction of a positive effect of marital dissolution experience on entry into marriage.

By adding the second attitudinal mechanism—attitudes toward marriage—to the mechanism based on attitudes toward nonmarital sex and cohabitation, this shortcoming can be overcome. The attitudes-toward-marriage mechanism suggests that a parental marital dissolution may make young people apprehensive about marriage and their success in it, which causes them to proceed more slowly. This caution could counteract any positive inclinations of children whose parents have experienced a

marital disruption to enter marriage more rapidly. In fact, if this caution is strong enough, it could result in an overall slower rate of entry into marriage for these children.

In the theoretical section, I also used the two attitudinal mechanisms to posit that a parental marital dissolution would be associated with a shifting of the union-formation experience from marriage to cohabitation. The data are consistent with this expectation, in that children of disrupted marriages were more likely than others to cohabit first and then enter into a marital relationship.

While the theoretical predictions produced by a combination of differential attitudes toward marriage and toward nonmarital sex and cohabitation are consistent with the empirical data, confirmation of the validity of these causal influences on cohabitation and marriage will require more direct measurement and evaluation. In addition, the inability of the other mechanisms to account for all of the empirical results does not demonstrate that they have no effects. They may, indeed, have the effects hypothesized, but those effects could be weaker than those of the attitudinal mechanisms. Thus, when their effects are in the same direction as the attitudinal mechanisms, the effects would be mutually reinforcing, but when the effects are in the opposite direction, the stronger effects of the attitudinal variables would prevail. Resolution of these issues also awaits further direct empirical measurement and testing of the specific causal mechanisms.

REFERENCES

- Blechman, Elaine A. 1982. "Are Children with One Parent at Psychological Risk? A Methodological Review." *Journal of Marriage and the Family* 44:179-95.
- Bloom, Bernard L., Shirley J. Asher, and Stephen W. White. 1978. "Marital Disruption as a Stressor: A Review and Analysis." *Psychological Bulletin* 85:867-94.
- Bumpass, Larry, and J. A. Sweet. 1972. "Differentials in Marital Instability: 1970." *American Sociological Review* 37:754-66.
- . 1988. "Preliminary Evidence on Cohabitation from the National Survey of Families and Households." Paper presented at the annual meeting of the Population Association of America, New Orleans.
- Cox, D. R. 1972. "Regression Models and Life Tables." *Journal of the Royal Statistical Society, ser. B*, 34:187-202.
- DeVanzo, J., and Frances Goldscheider. 1990. "Returns to the Nest in Young Adulthood." *Population Studies* 44:241-55.
- Duncan, Greg J., and S. D. Hoffman. 1985. "Economic Consequences of Marital Instability." In *Horizontal Equity, Uncertainty, and Well-Being*, edited by M. David and T. Smeeding. Chicago: University of Chicago Press.
- Edwards, John N. 1987. "Changing Family Structure and Useful Well-Being: Assessing the Future." *Journal of Family Issues* 8:355-72.
- Freedman, Deborah, Arland Thornton, Donald Camburn, Duane Alwin, and Linda Young-DeMarco. 1988. "The Life History Calendar: A Technique for Collecting

- Restrospective Data." In *Sociological Methodology*, vol. 18. Edited by C. C. Clogg. San Francisco: Jossey-Bass.
- Furstenberg, Frank F., Jr. 1979. "Premarital Pregnancy and Marital Instability." Pp. 83-98 in *Divorce and Separation*, edited by G. Levinger and O. C. Moles. New York: Basic.
- Glenn, Norval D., and Kathryn B. Kramer. 1985. "The Psychological Well-Being of Adult Children of Divorce." *Journal of Marriage and the Family* 47:905-12.
- Goldscheider, Frances K., and J. DaVanzo. 1989. "Pathways to Independent Living in Early Adulthood: Marriage, Semiautonomy, and Premarital Residential Independence." *Demography* 26:597-614.
- Goldscheider, Frances K., and Calvin Goldscheider. 1988. "The Intergenerational Flow of Income. Family Structure and the Status of Black Americans." Paper presented at the annual meeting of the Population Association of America, New Orleans.
- Gwartney-Gibbs, Patricia A. 1986. "The Institutionalization of Premarital Cohabitation: Estimates from Marriage License Applications." *Journal of Marriage and the Family* 48:423-34.
- Hayes, Cheryl D., ed. 1987. *Risking the Future*. Washington, D.C.: National Academy.
- Hetherington, E. Mavis. 1979. "Divorce: A Child's Perspective." *American Psychologist* 34:851-58.
- Hogan, Dennis P. 1978. "The Effects of Demographic Factors, Family Background, and Early Job Achievement on Age at Marriage." *Demography* 15:161-75.
- Hogan, Dennis P., and E. M. Kitagawa. 1985. "The Impact of Social Status, Family Structure, and Neighborhood on the Fertility of Black Adolescents." *American Journal of Sociology* 90:825-55.
- Inazu, J. K., and G. L. Fox. 1980. "Maternal Influence on the Sexual Behavior of Teenage Daughters." *Journal of Family Issues* 1:81-102.
- Longfellow, Cynthia. 1979. "Divorce in Context: Its Impact on Children." Pp. 287-306 in *Divorce and Separation*, edited by G. Levinger and O. C. Moles. New York: Basic.
- Marini, Margaret M. 1978. "The Transition to Adulthood: Sex Differences in Educational Attainment and Age at Marriage." *American Sociological Review* 43:483-507.
- McLanahan, Sara. 1985. "Family Structure and the Reproduction of Poverty." *American Journal of Sociology* 90:873-901.
- McLanahan, Sara, and Larry Bumpass. 1988. "Intergenerational Consequences of Family Disruption." *American Journal of Sociology* 94:130-52.
- Menaghan, Elizabeth G., and Morton A. Lieberman. 1986. "Changes in Depression Following Divorce." *Journal of Marriage and the Family* 48:319-28.
- Moore, K. A., J. L. Peterson, and Frank F. Furstenberg, Jr. 1984. "Starting Early: The Antecedents of Early Premarital Intercourse." Revised version of a paper presented at the annual meeting of the Population Association of America, Minneapolis.
- Namboodiri, K., and C. M. Suchindran. 1987. *Life Table Techniques and Their Applications*. Orlando, Fla.: Academic Press.
- Newcomer, Susan, and J. Richard Udry. 1987. "Parental Marital Status Effects on Adolescent Sexual Behavior." *Journal of Marriage and the Family* 49:235-40.
- Pearlin, Leonard I., and Joyce S. Johnson. 1977. "Marital Status, Life-Strains and Depression." *American Sociological Review* 42:704-15.
- Peterson, James L., and Nicholas Zill. 1986. "Marital Disruption and Behavior Problems in Children." *Journal of Marriage and the Family* 48:295-307.
- Pratt, W. 1965. "A Study of Marriage Involving Premarital Pregnancies." Ph.D. dissertation. University of Michigan, Department of Sociology.

American Journal of Sociology

- Rindfuss, R. R., and S. P. Morgan. 1984. "The Transition to Motherhood: The Intersection of Structural and Temporal Dimensions." *American Sociological Review* 49:359-72.
- Teachman, Jay D. 1983. "Analyzing Social Processes: Life Tables and Proportional Hazards Models." *Social Science Research* 12:263-301.
- Thornton, Arland. 1985. "Changing Attitudes toward Separation and Divorce: Causes and Consequences." *American Journal of Sociology* 90:856-72.
- . 1988. "Cohabitation and Marriage in the 1980s." *Demography* 25:497-508.
- . 1989. "Changing Attitudes toward Family Issues in the United States." *Journal of Marriage and the Family* 51:873-93.
- Thornton, Arland, Duane F. Alwin, and Donald Camburn. 1983. "Causes and Consequences of Sex-Role Attitudes and Attitude Change." *American Sociological Review* 48:211-27.
- Thornton, Arland, and Donald Camburn. 1987. "The Influence of the Family on Premarital Sexual Attitudes and Behavior." *Demography* 24:323-40.
- Thornton, Arland, and Deborah Freedman. 1982. "Changing Attitudes toward Marriage and Single Life." *Family Planning Perspectives* 14:297-303.
- Thornton, Arland, and Willard L. Rodgers. 1987. "The Influence of Individual and Historical Time on Marital Dissolution." *Demography* 24:1-22.
- Udry, J. Richard, and John O. G. Billy. 1987. "Initiation of Coitus in Early Adolescence." *American Sociological Review* 52:841-55.
- Wallerstein, Judith S., and Joan Berlin Kelly. 1980. *Surviving the Breakup*. New York: Basic.
- Webb, Marilyn. 1988. "Sex and Single Parents." Pp. 104-9 in *Marriage and Family 88/89*, edited by Olke Pocs. Guilford, Conn.: Dushkin.
- Weiss, Robert S. 1979. "Growing Up a Little Faster: The Experience of Growing Up in a Single-Parent Household." *Journal of Social Issues* 35:97-111.
- Weltzman, Lenore J. 1985. *The Divorce Revolution*. New York: Free Press.

Legal Custody Arrangements and Children's Economic Welfare¹

Judith A. Seltzer

University of Wisconsin—Madison

This article investigates the effects of legal custody arrangements on the amount of child support fathers pay after divorce, contrasting the experiences of families in which parents share authority over children through joint legal custody and those in which mothers have sole legal custody. It argues that joint legal custody encourages similarities between the way divorced fathers and fathers in two-parent households invest in their children. The analysis uses data from a representative sample of recent divorces, in which children live with their mothers, to explore the relationship between legal custody and legal child-support obligations (awards) and to investigate the effects of the type of custody on child-support payments. Joint legal custody is associated with higher support awards, but the association is explained by the higher incomes of fathers with joint custody. Legal custody arrangements do not affect levels of child-support payments when family characteristics and the amount of child support awarded at divorce are taken into account. Legal custody does, however, alter the process governing fathers' contributions to child support. Parents' incomes have a larger effect, and child-support awards a smaller one, on payments among families with joint legal custody, suggesting that joint legal custody may allow fathers greater discretion about contributions to child support. By strengthening ties between divorced fathers and children, joint legal custody may increase the correspondence between parents' and children's socioeconomic status and result in greater inequality among children of divorce.

Even in a society that values equal opportunity, children's welfare depends on who their parents are and the type of families in which they

¹ This article was first presented at the annual meeting of the Population Association of America held in Toronto, Ontario, May 1990. The research was supported by a grant from the National Institute of Child Health and Human Development (HD-24571) and contracts 144W857 and 144AK93 between the Wisconsin Department of Health and Social Services and the Institute for Research on Poverty. Computing was provided by the Center for Demography and Ecology, which receives core support from the Center for Population Research of the National Institute of Child Health

are raised. Both the structure of families and the patterns of family interaction associated with family structure affect children's opportunities. Investigations of family effects on economic inequality usually address three questions: Do children from various family structures differ in their levels of socioeconomic welfare? To what extent are differences in levels of welfare attributable to other factors that vary across family structures, such as socialization practices and access to resources outside of the family?² Finally, does family structure affect how much parents and children resemble each other in their life chances and life-styles? The idea that families differ in their ability to reproduce themselves has guided such diverse sociological pursuits as status-attainment research, demographic studies of fertility, and functional theories about the nuclear family. Recently, high rates of divorce and remarriage have motivated researchers to compare children from single- and two-parent families using the framework outlined by these questions. Children's repeated transitions between two-parent, single-parent, and parent-stepparent households complicate the conceptual and methodological problems of studying the consequences of family membership.

Families differ not only in their living arrangements but also in the legal obligations that bind parents and children after divorce. Studies of families usually focus on those who live together because living arrangements reflect the physical setting and economic resources that directly affect children's welfare. The legal dimension of family relationships may also affect children's welfare. Within marriage, legal and physical custody coincide. After divorce, children's living arrangements (physical custody) may not correspond to the allocation of parents' legal authority to make decisions about their children's lives (e.g., decisions about health care and schooling). Parents may have joint legal custody and therefore have equal authority over their children even when only one parent lives with the children. How parents divide their legal rights and responsibilities for child care may alter the extent to which living arrangements determine children's access to economic resources. Children from families in which parents share legal custody may be more involved with both of

and Human Development (HD-5876). The opinions expressed in the paper are my own and do not necessarily reflect those of the funding agencies, the institute, or the center. I am grateful to Robert Mare, Sara McLanahan, Nora Cate Schaeffer, and the anonymous reviewers for helpful comments on earlier versions of this article. I also appreciate Wendy Manning's research assistance and Elizabeth Evanson's editorial advice. Requests for reprints should be sent to Judith A. Seltzer, Department of Sociology, 1180 Observatory Drive, University of Wisconsin, Madison, Wisconsin 53706.

² See, e.g., Duncan and Duncan (1969), Jencks et al. (1979), Hetherington, Cox, and Cox (1982), McLanahan (1985), McLanahan and Bumpass (1988), and Peterson and Zill (1986).

their parents, regardless of where they live, than children in families in which only one parent has legal custody.

In this article, I investigate the effects of custody on children's economic welfare after divorce by examining the relationship between alternative legal custody arrangements and the amount of child support fathers pay. In particular, I examine the effects of joint legal custody versus mother-only custody on child-support payments among families in which children live with their mothers, the most common living arrangement after divorce. By exploring a factor that may mediate the economic disadvantages of living with a single mother, I extend research on how family structure affects children. My analysis builds on previous research by examining whether custody differences in levels of child-support payments can be explained by differences in parents' socioeconomic status (SES) or in legal child-support awards. It also contributes to an understanding of the consequences of divorce by investigating how custody arrangements alter the processes that govern parents' investments in children. These questions are important for social policy as well as for social science. Although laws allowing joint custody of children after divorce have become more common, we have little reliable information about the consequences of joint custody. In this article, I use unique data to explore the association between two outcomes highlighted in recent legislative reforms: joint custody and child-support payments.

In the next section, I argue that adoption of joint-custody laws reflects the traditional American value of equality of opportunity between families, although it may have the unanticipated consequence of increasing inequality among children whose parents are divorced. Then, I examine the importance of custody and child support in understanding the effects of family membership on children's welfare and describe the data used in this analysis. The analysis is presented in two parts: an investigation of the relationship between legal custody and child-support awards at the time of divorce and an investigation of the effects of custody on child-support payments. I conclude with a discussion of the implications of the research findings for understanding equality among American children.

IMPLICATIONS OF JOINT CUSTODY FOR CHILDREN'S OPPORTUNITIES

Joint-custody laws attempt to rectify the economic and emotional disparities between children who live with single mothers and those who live with two parents (Stack 1976; Schepard 1985).³ Children who live with

³ Even among families with joint legal custody, most children live with their mothers (Maccoby, Depner, and Mnookin 1988, table 5.1; Seltzer 1990, table 1).

single mothers suffer material disadvantages; they are more likely to spend part of their formative years in poverty (Duncan 1988) or suffer a dramatic decline in standard of living as compared with their predivorce, two-parent household (Hoffman and Duncan 1988). In addition to the loss of economic resources, children in single-mother households are less closely supervised by both their absent fathers and their mothers, who are struggling to maintain households on their own (Dornbusch et al. 1985; Hetherington et al. 1982; Steinberg 1987). The economic and social costs of divorce affect children's life chances. Compared with children in two-parent households, children from divorced families who live with single mothers are more likely to drop out of high school (McLanahan 1985), pose discipline problems in school (Hetherington, Cox, and Cox 1979), and engage in delinquent behavior (Matsueda and Heimer 1987). Joint custody may ameliorate some of the disadvantages of living in a single-mother household by diminishing the economic hardships of single parenthood through increased child-support payments. Joint custody may also increase adult supervision by encouraging fathers to spend more time with their children. In its attempt to make children's lives after divorce as much like their lives before divorce as possible (Wallerstein and Blakeslee 1989; Felner and Terre 1987), joint-custody legislation embodies the American ideals of equality of opportunity for all children, regardless of family background. Joint-custody laws "presume that children are entitled to the joint care and custody of both parents, . . . whether or not they are now or ever have been married" (Goldstein 1984, p. 47). By increasing paternal involvement, joint-custody legislation may reduce the effects of family structure on children and thereby increase equality between children who experience divorce and those who do not.

Paradoxically, strengthening ties between fathers and children after divorce may increase inequality for children in single-mother households at the same time as it decreases the effects of family structure on children. Among families who live together, fathers' SES affects children's values (Alwin 1984; Kohn 1977; Rubin 1976), their health (Angel and Worobey 1988; Fuchs 1974), their progress in school (Sewell and Hauser 1975; Gamoran and Mare 1989), and their access to extracurricular educational opportunities (Heyns 1978; Medrich et al. 1983). Fathers who do not live with their children have considerably less opportunity to influence their children's attitudes and behavior. By facilitating contact between nonresident fathers and children, joint legal custody may strengthen the effects of fathers on children. Whether this benefits the children depends on the fathers' characteristics.⁴ Increased involvement with fathers who are

⁴ This argument parallels, to some extent, claims made by groups who oppose joint legal custody and liberal visitation policies because they expose children to fathers

highly educated and wealthy may enhance children's welfare, while contact with fathers who are poor may diminish children's economic welfare. Thus, an unintended consequence of joint-custody legislation may be to strengthen the association between fathers' SES and that of the children, thereby increasing inequality among children of divorce.⁵ Debates about the benefits of paternal involvement for children of divorce acknowledge that these benefits depend on fathers' characteristics (e.g., Novinson 1983) but do not explicitly consider the implications of this factor in evaluating children's welfare. Similarly, research ignores the critical questions of how and to what extent fathers' characteristics affect the consequences of joint custody.

CUSTODY, CHILD SUPPORT, AND THE INTERGENERATIONAL TRANSMISSION OF SOCIOECONOMIC STATUS

That joint custody increases paternal involvement suggests that fathers with joint legal custody may pay more child support than those who do not have custody. The processes governing parents' financial investment in children may also differ for families with and without joint custody. This section outlines hypotheses about the effects of joint legal custody on child-support payments, taking account of the relationship between custody and legal obligations to pay support (i.e., the amount of child support awarded) to specify more fully the family and legal constraints affecting fathers' contributions to child support.

Joint Custody and Child-Support Payments

Effects on levels of support payments.—Advocates of joint custody claim that by increasing fathers' formal attachment to children through legal recognition of paternal rights, joint custody will increase the amount of child support that fathers pay. On the surface, these goals imply hypotheses about custody differences in the *levels* of involvement and child support contributed by nonresident fathers. The few investigations to date of the effects of custody on child support test these hypotheses by

who are physically or emotionally abusive (Schulman and Pitt 1982; California Senate 1987)

⁵ Family background affects children's welfare in a variety of ways. In particular, growing up in a single-mother household dramatically increases the likelihood that daughters will become single mothers themselves (McLanahan and Bumpass 1988) and suffer the economic disadvantages associated with supporting children alone. Whether increasing fathers' involvement diminishes the intergenerational transmission of female heads of families is an empirical question. This article does not attempt to assess the net effects on children's life chances of increasing the opportunities for paternal involvement after divorce.

examining differences in time spent with children (Wolchik, Braver, and Sandler 1985) and in the amount of support and the regularity of payments provided by nonresident fathers (Pearson and Thoennes 1985, 1988). These studies generally find that fathers with joint custody spend more time with children and contribute higher levels of support than those without custody.⁶

Effects on the determinants of support payments.—While studies show higher mean levels of child support among families with joint legal custody than those with mother-only custody, research has not investigated a key assumption underlying legislative movement toward joint custody—that increased paternal participation enhances the *effects* of fathers' characteristics on the structure of children's lives. Compared with fathers in families with sole-mother custody, fathers with joint legal custody may have greater discretion about how to fulfill their responsibilities to children. The latter may choose to spend more of their income on child support or on other resources that affect children's achievement (e.g., gifts, tuition payments, and trips to libraries), either because joint custody formally recognizes paternal responsibilities and good fathers provide for their children or because joint custody increases the informal benefits of paternity (Weiss and Willis 1985). When fathers have lower incomes, joint custody may allow them to pay less child support than under other custody arrangements because they can more easily explain their financial constraints to their children or their former wives. Although acquiring joint legal custody does not by itself alter nonresident parents' responsibility to contribute to children's support, either the characteristics of parents who choose joint custody or the father's status as legal custodian may enable fathers to use greater discretion in fulfilling their economic obligations to children. This argument implies that joint custody conditions the effects of fathers' characteristics on the amount of child support children receive after divorce.

Increasing fathers' discretion about how much child support to pay may also strengthen the association between mothers' income and the amount of child support received. A mother's ability to earn income or the availability of a new spouse to supplement her income reduces the amount of child support from fathers "needed" by children for survival.

⁶ Related research shows a positive association between spending time with children and contributions to child support (Furstenberg et al. 1983; Seltzer, Schaeffer, and Charng 1989). Fathers who see their children frequently have more opportunities to buy things for them. Pearson and Thoennes (1988) find that custody arrangements have little effect on child-support payments, once patterns of visits are taken into account, but the causal relationship between spending time with children and child-support payments is complex.

Previous studies demonstrate that child-support awards (O'Neill 1985; Teachman and Polonko 1989; Seltzer and Garfinkel 1990) and payments (O'Neill 1985) depend, in part, on mothers' socioeconomic characteristics. Public opinion data also suggest that both parents' financial resources affect perceptions of how much child support fathers should pay (Schaeffer 1990). Fathers with joint legal custody have more opportunities to observe their children's needs and to learn about the standard of living that the resident mother is able to provide for them. In addition, mothers with higher incomes may be able to afford to forgo more child support if the children's father provides for them in other ways, such as buying things for the children when he spends time with them. These paternal contributions are more likely when fathers share legal custody. Consequently, the effect of mothers' income on the amount of support received may be greater among families with joint legal custody than among those in which mothers have sole custody.

Are custody and child support the result of common causes?—The discussion thus far has focused on the causal relationships between custody and child-support payments. The relationship between custody and child support, however, may also arise from their having a common cause. Nonresident fathers with joint legal custody may pay more child support than those without custody if both custody decisions and support payments are the result of a third variable or set of variables. For example, an increase in family's SES increases the likelihood of joint custody (Del Boca 1986; Koel et al. 1988; Seltzer 1990), and an increase in father's income increases child-support payments (Beller and Graham 1986; Cassetty 1978; Hill 1988). Fathers with higher educations may be more involved in child care before divorce than fathers with less education, given the positive association between education and egalitarian gender-role attitudes (Cherlin and Walters 1981; Mason and Lu 1988). The commitment of fathers with more education to continued involvement with children and these fathers' greater access to financial resources may account for both the choice of joint custody and higher child-support payments. Thus, there may be a positive association between joint legal custody and child-support payments because both custody and support depend on parents' SES. Parents' ability to cooperate with each other may also account for a positive association between joint custody and the amount of child support paid after divorce. Parents who want to share child care may express this goal by choosing joint custody and sharing child-support responsibilities through regular support payments. This interpretation, then, suggests that joint custody and child-support payments have no causal association; rather, they are the result of common predictors.

The Role of Child-Support Awards

Child-support awards constrain support payments by establishing a legally enforceable lower limit to the amount of child support that nonresident parents must pay. The amount of support awarded (owed) is a strong predictor of the amount of support paid among families with child-support awards (Peterson and Nord 1987; Beller and Graham 1986). Few families without awards exchange any child support, and when they do, the dollar amount is less than among those who have awards (Roan 1989). Thus, a more complete understanding of the relationship between custody and support payments requires information about the relationship between custody and the amount of support awarded.

Custody and levels of child-support awards.—Parents decide about custody and the level of child-support awards at the same time; divorce laws and judicial interpretations also explicitly link custody and child-support arrangements in divorce settlements (Mnookin and Kornhauser 1979; Wisconsin Statutes 1987, chap. 767.25). Not only are decisions about custody and support awards made in the same negotiations, but parents also exchange rights to custody and support as they bargain about their settlements. Mothers claim that they trade rights to support for sole legal custody of children (Arendell 1986; Weitzman 1985). If parents exchange custody or rights to children and support, families with joint legal custody are likely to have higher support awards than those in which mothers have sole legal custody, all else being equal.

The causal relationship between parents' decisions about custody arrangements and support awards is ambiguous. Joint custody may determine the level of support awarded if joint legal custody encourages fathers to agree to higher awards because their custodial responsibilities require them to continue in the good-provider role.⁷ Or, mothers may seek higher levels of child support as a way of recognizing that both parents will share the social *and* economic responsibilities of child rearing. Alternatively, the level of support awarded may determine custody choices if fathers with high awards seek joint legal custody as a way of controlling how their child-support contributions are spent. Finally, both custody and child-support awards may depend on parents' predivorce

⁷ In contrast, opponents of joint custody claim that nonresident fathers use joint custody as a way to *avoid* responsibilities (Fineman 1988). Nonresident fathers may use the legal designation of custodian to argue that they contribute materially to child rearing and therefore should not owe as much child support as fathers who do not share custody of their children (California Senate 1987). Studies of custody and support arrangements at divorce show little effect of joint legal custody on whether or not families have support awards when children live with their mothers (Pearson and Thoennes 1985); however, among those with awards, families with joint legal custody have higher awards than those in which mothers have sole custody (Koel et al. 1988).

attitudes toward child care (e.g., when both parents value children and view their responsibilities as lifelong) or on parents' education and income. As noted above, joint legal custody is more common among those with higher SES, and the amount of child support awarded at divorce depends on parents' incomes and their ability to provide for children's material needs. Families with joint legal custody, therefore, may have higher support awards because both custody and awards depend on the same family characteristics. Regardless of the causal relationship between custody and child-support awards, differences in payments by custody type may instead be attributable to custody differences in levels of child support awarded at divorce.

Effects of custody on compliance with support awards.—The importance of child-support awards in determining how much support fathers pay is likely to depend on their legal custody arrangements. In particular, the amounts awarded for child support may constrain payments less when families have joint legal custody than when mothers have sole custody. Awards may have less influence on payments if fathers with joint custody have more discretion about how to participate in child care by spending time with the children and providing material support. The greater contact between fathers and children as well as between former spouses that is associated with joint custody allows fathers more flexibility to respond to changes in their own and their former wives' economic circumstances. Fathers with joint custody may choose to pursue their own self-interests or to benefit their children.⁸ Finally, parents who share legal custody may be more willing to renegotiate child-support arrangements outside court than those who do not share custody, because the former are likely to be more interested in cooperating in child rearing.⁹

Child-support awards are also less likely to constrain the support payments of fathers who have joint legal custody compared with those who do not have custody if fathers with custody have higher awards than they intend or are able to pay. Because child-support awards and custody result from a negotiated settlement, fathers may promise to pay more child support as a strategy to gain joint custody without regard to whether they will fulfill this promise. Similarly, mothers may demand higher support awards in exchange for giving fathers joint legal custody,

⁸ If joint custody allows fathers more opportunities to choose between acting in their own and their children's interest, mothers may lose autonomy in child rearing after divorce (Schulman and Pitt 1982; McLanahan 1989). An evaluation of the relative costs and benefits of joint custody for mothers and fathers is beyond my scope here.

⁹ Previous research provides inconsistent evidence on this point. Ifeld, Ifeld, and Alexander (1984) find that relitigation rates are lower among those with joint custody than among those with sole custody, while Phear et al. (1984) find little effect of custody on the proportion of families who return to court to resolve financial disputes.

but fathers may be unable or unwilling to comply with their support agreements after the divorce. The effect on child-support payments of the amount of support awarded, therefore, is likely to be lower among families with joint legal custody than among those in which mothers have sole legal custody.

DATA

The analysis uses data from a representative sample of Wisconsin divorce cases involving minor children. The data set, the Court Record Database (CRD), includes detailed information about the legal aspects of divorce for a sample of approximately 4,300 divorce and legal separation cases involving children potentially eligible for child support. The data base includes abstracts from the record of the initial court contact, parents' financial records filed at the time of divorce, and records of payments that nonresident parents make to the clerk of courts. The sample includes cases regardless of whether the custody settlements had been stipulated or legally contested. The divorce case or family is the unit of analysis.

The CRD sample design reflects the organization of the child-support system in Wisconsin, which is administered at the county level. Within counties, the sample frame for the CRD includes family-court cases involving children eligible for support (i.e., cases with minor children who have two living parents). This article uses data from five cross-sectional samples of divorce cases that entered the court system between July 1980 and June 1985. The cases were sampled from 22 counties.¹⁰ This analysis uses data from the first 12 months after the final divorce judgment (or temporary order, if the case did not have a final judgment).¹¹ (For a more detailed discussion of sample design, see Garfinkel et al. [1988].) The pooled cross-sectional sample includes 4,327 cases. From these, I excluded 42 cases (1% of the sample) because custody was not assigned or there were errors in the child-support payment information. The analysis uses data from 3,527 cases (82% of the remaining sample) in which moth-

¹⁰ The sample includes observations from 22 counties for the years 1980-83 and a subset of 20 counties for the years 1984 and 1985. Two counties, LaCrosse and Milwaukee, were sampled only in the early years of data collection because of changes in counties' willingness to participate in the study and elements of the design affecting the project's larger goal, evaluating the Wisconsin child-support reforms. (See Garfinkel [1988] and Garfinkel and Uhr [1984] for a discussion of the reforms.) These elements are not relevant to the substantive issues addressed here. Cases from all 22 counties are included in this analysis to increase the number of joint-custody cases. All analyses reported below include dummy variables indicating the county in which cases were heard as well as the year of initial observation.

¹¹ Approximately 14% of the analysis subsample did not have a final judgment during the period of observation.

ers had sole legal and physical custody or in which parents shared legal custody with the mothers as the primary physical custodians.

Using data from a single state to investigate custody and child-support practices has the advantage of limiting variation in the legal environment affecting custody decisions. For the period represented by cases in the CRD sample, Wisconsin law allowed joint custody when it was in the best interest of the child (Wisconsin Statutes 1985: chap. 767.24). While most other states also have joint-custody laws, there is wide variation in the content of the laws and in their implementation (Freed and Walker 1987). The Wisconsin CRD improves on previous state-based samples by including cases sampled throughout the state rather than restricted to one or two counties (see, e.g., Weitzman 1985; Maccoby et al. 1988; McLindon 1987; Koel et al. 1988).

On the other hand, a disadvantage of data from Wisconsin is the inadequate representation of large urban areas. Because child-support practices may depend on community size (Chambers 1979), the analysis includes variables indicating the county in which a case was heard. Preliminary analyses show very few significant differences in custody arrangements or child-support awards and payments between Milwaukee County, the state's largest urban area, and smaller counties. Wisconsin also has a much smaller population of blacks and Hispanics than the United States as a whole. The data, therefore, are more appropriate for generalizing to the U.S. white population's custody and child-support arrangements than to those of minority populations. However, a previous analysis of divorce settlements in the Wisconsin CRD shows striking similarity between these state data and data from the Current Population Survey (CPS) for the entire United States on the limited information that is available in the CPS (Seltzer and Garfinkel 1990). The unique combination of detailed information about custody arrangements, child-support awards, and payments allows a more thorough analysis of these aspects of children's lives after divorce than has been possible for the nation as a whole. In addition, these data improve on those used in previous studies of the economic consequences of legal custody because the sample represents all divorces rather than a self-selected group of families who contested custody or agreed to divorce mediation.

Measuring Custody

The CRD abstracts of divorce petitions and outcomes include reliable information about legal custody arrangements.¹² Physical custody is indi-

¹² The CRD information about physical custody arrangements, i.e., where children actually live after the divorce, is somewhat limited. In part, this is because parents and

cated by responses to the item in the data abstraction form "Number of children living primarily with each parent." The court records require that physical custody be defined by whether children spend most of the year with either their mother or father or divide their time equally between the mother's and father's household.¹³ The first entry in table 1 shows that 17% of the cases in this sample have joint legal custody; in the remainder of cases, mothers have sole legal custody. As noted above, all of the children in this analysis reside with their mothers, regardless of the type of legal custody.

Measuring Child-Support Awards and Payments

This study investigates two aspects of child-support practices after divorce: the amount of support required by the divorce settlement and the amount of support paid, as recorded during the 12-month period following the final judgment.¹⁴ Support awards and payments include child support, family support, and maintenance.¹⁵ Because Wisconsin requires that all child-support awards be paid to the court and then distributed to recipients (Wisconsin Statutes 1985, chap. 767.29), these data provide

the courts assumed, until recently, that children would live with their legal custodian; therefore there was no reason to obtain additional information about physical custody. In addition, living arrangements and children's visits with a nonresident parent are usually the result of informal agreements that may fluctuate widely in the short term. The difficulty of taking these fluctuations into account may mean that it is easier for parents and courts to leave physical custody unspecified. However, Koel et al. (1988) find that court documents for families with joint legal custody include more complete information about how much time children will spend with each parent than do those for sole legal custody.

¹³ A more sophisticated treatment would identify the physical custodian on the basis of a continuous indicator of the amount of time the child lives with each parent. This would enable one to distinguish between families in which children spent all of their time in the mother's household from those in which children spent extended periods, but less than six months a year, with the father. Identifying the physical custodian by a dichotomy may result in more misclassifications among families with joint legal custody than those in which mothers have sole legal custody, because the former are probably more likely to arrange for children to live part, but less than half, of the time with each parent. Despite this disadvantage, these data provide better information about both legal and physical custody than is generally available.

¹⁴ The support variables are annualized for cases observed for fewer than 12 months. Of those who owe support, 25% have less than 12 months of payment data.

¹⁵ Maintenance or alimony refers to payments that are made to help support the mother; family support refers to payments for the mother and children; child support is for children only. For recent divorce cases involving minor children, the distinctions among these types of support are largely a matter of evaluating tax benefits for the payer and recipient rather than issues related to parents' involvement in child rearing. Award and payment variables are measured in 1980 constant dollars.

TABLE 1

MEANS AND STANDARD DEVIATIONS FOR LEGAL CUSTODY, CHILD-SUPPORT PRACTICES,
AND FAMILY AND CASE CHARACTERISTICS

VARIABLE	SAMPLE CHARACTERISTICS		
	All Cases	Joint Legal Custody	Mother Has Sole Legal Custody
Legal custody (1 if joint; 0 if mother) .	.172 (.377)	...	...
Child-support practices:			
Case has a support award (1 if yes)...	.843 (.364)	.897 (.304)	.831 (.374)
Amount of award, all cases (thousands of dollars).....	2.805 (3 469)	3.653 (5.065)	2.629 (3.007)
Amount of award, cases with awards (thousands of dollars)*	3.260 (3.293)	3.954 (4 997)	3.106 (2.754)
Amount of support paid, cases with awards (thousands of dollars)*	2.191 (2.727)	2.641 (3.711)	2 091 (2.445)
Family characteristics at divorce:			
Father's annual income (thousands of dollars)....	16.052 (10.240)	18.873 (13.455)	15.468 (9.335)
Father's income missing (1 if yes)	.267 (.442)	.192 (.394)	.282 (.450)
Mother's annual income (thousands of dollars).....	8.202 (4 756)	8.361 (5 167)	8.170 (4.667)
Mother's income missing (1 if yes) ....	.188 (.391)	.164 (.371)	.193 (.395)
Number of minor children	1.77 (.875)	1.77 (.824)	1.77 (.885)
Age of eldest minor child (years)	7.27 (5.26)	7.45 (4.99)	7 24 (5.32)
Marital duration (years).....	9.57 (6.52)	9.88 (6 02)	9.50 (6 62)
Divorce case characteristics:			
Both parents have lawyers (1 if yes) ..	.509 (.500)	.561 (.497)	.498 (.500)
Support automatically withheld from income (1 if yes)* .....	.167 (.373)	.174 (.380)	.166 (.372)
Number of months of payment data*	10.47 (2.99)	10.43 (3.10)	10.48 (2.97)
Unweighted N.....	3,527	672	2,855

SOURCE.—Wisconsin Court Record Database, cases that entered court 1980–85.

NOTE.—Income and child-support variables are coded in constant dollars with 1980 as the base year. Standard deviations are in parentheses.

* Statistics are calculated for the subset of cases with support awards. Unweighted N for all cases with awards = 2,932; for joint legal custody = 576, for sole-mother custody = 2,356.

more reliable estimates of official child-support payments than are available from retrospective survey reports. Official court documents underestimate contributions to child support because they do not record payments or contributions the nonresident parent makes directly to the children or to the resident parent or payments to third parties who provide the children with goods and services, such as school fees or rent payments. Underestimates arise in two instances: when the courts approve parents' decisions to have the nonresident parent make periodic support payments privately and when nonresident parents make extra payments in addition to the periodic support that they provide through the courts. For this sample, only 2.4% of the cases with awards have court-sanctioned private payment agreements (2.1% for cases in which mothers have sole legal custody and 3.4% for cases with joint legal custody).¹⁶ I exclude these cases from the analysis. Unfortunately, the CRD does not include information about extra payments that nonresident parents provide to support their children.¹⁷

Table 1 shows that most divorcing parents in Wisconsin have support awards; 84% of cases with either sole-mother custody or joint legal custody have some type of support award. The awards are not, however, very large, averaging approximately \$2,800 for the first year after divorce. As is well known, payments are also low (Weitzman 1988). Resident mothers with support awards receive an average of \$2,191 a year.¹⁸ Table 1 also shows that child-support arrangements differ for the two legal custody arrangements. Families with joint legal custody are more likely to have support awards than those in which mothers have legal

¹⁶ The difference by legal custody type when the data are weighted to take into account differences in the probability of sample selection is 3.0% vs. 3.6% for mother and joint custody, respectively.

¹⁷ In a recent survey of divorced mothers in Wisconsin, 22.8% reported that they received extra payments in addition to their regular child support, but only 7.4% of those who did not receive regular support payments received extra payments. Some portion of these extra payments may be made through the courts, but most are probably arranged informally outside the legal system. The percentage of cases that receive extra payments to supplement those channeled through the court system may be higher among families who share physical custody of their children. The figures cited are from unpublished tables from the Children, Incomes, and Program Participation Survey (CHIPPS) conducted by the Institute for Research on Poverty at the University of Wisconsin—Madison. The data analyzed are described in detail in MacDonald (1986), Schaeffer (1990), and Seltzer et al. (1989).

¹⁸ The Wisconsin data provide an estimate that is quite similar to the national estimate of \$1,944 (in 1980 dollars) for divorced women in 1985 (U.S. Bureau of the Census 1989, table B). The Wisconsin estimate may be higher because it refers to payments in the first year after divorce while the national estimate includes families who have been separated for longer periods. Child-support payments decline the longer parents have been separated (Hill 1985). The Wisconsin data also differ from the national data by including maintenance as well as child support.

custody (.90 vs. .83, respectively). For all cases, whether or not they have a support award, fathers with joint legal custody owe slightly over \$1,000 more than those in families in which mothers have sole legal custody. Among families who have support awards, those with joint-custody arrangements have awards that are about \$850 more per year than mother-custody families. Payments follow a similar pattern. Among families with awards, those fathers with joint legal custody pay approximately \$550 more a year. The average amount of support paid when mothers have legal and physical custody is only \$2,091 a year. In addition, there is considerably more variation in support payments among families with joint legal custody than among families in which mothers have sole custody. The standard deviation (SD) for amount paid is approximately 1.5 times larger for those with joint legal custody.

Independent Variables: Family and Divorce Characteristics

The analysis considers the effects of SES and family composition on custody, awards, and payments. Descriptive statistics for these characteristics are presented in the section of table 1 labeled "Family characteristics at divorce." Socioeconomic status is measured by each parent's annual income at the time of the final judgment. By treating each parent's income separately rather than combining the incomes, the analysis takes into account the individual economic resources that parents can use to influence custody and support decisions.¹⁹ Fathers may use income to acquire joint legal custody and to avoid child-support obligations (i.e., by lowering the amount of child support owed). Alternatively, fathers who care about their children's economic welfare may use their higher incomes to support larger awards. Mothers may use their incomes to acquire sole legal custody as a way of protecting their postdivorce autonomy. Mothers' economic resources may increase their ability to acquire larger support awards, although studies suggest that when mothers have higher incomes they are awarded less child support, perhaps because they are better able to support children as single parents (Seltzer and Garfinkel 1990).

Approximately one-third of the cases in this sample had missing information on either the mother's or father's income. These cases were assigned the mean sample income for mothers and fathers, respectively.

¹⁹ Parents' incomes may also reflect the effects of education on custody and child-support arrangements. The CRD has such high rates of missing data on education that it was not possible to include parents' educations in the analysis. To the extent that income and education are correlated, the effects of income may also reflect education differences in parenting after divorce.

Cases with missing information on income are identified by dummy variables in the multivariate analyses reported below, and the discussion considers explanations for mean differences in custody and child-support arrangements for those with and without income data. In addition, a reanalysis of the data for cases with income information for both parents provides results that are quite similar to the results for the full sample reported in tables 2 and 3 below. A few of the custody differences in the determinants of child-support payments are not, however, statistically significant for the smaller subsample of cases with income information. Although it has the disadvantage of lacking income data for a substantial minority of cases, the CRD includes more systematic information about both parents' financial resources, custody arrangements, child-support awards, and payments than is available in other data sources.

Table 1 shows that families with joint legal custody have higher average incomes of both mothers and fathers than families in which mothers have legal custody. The difference by custody type, however, is much larger for father's income than for mother's income. Father's annual income at divorce is approximately \$3,400 less in mother-custody families than in joint-custody families, while the custody difference in mother's income is less than \$200 a year.

The analysis also includes several measures of family characteristics: the number of children age 18 or younger in the family, the age of the eldest minor child, and the duration of the couple's marriage. These variables indicate parents' involvement in child rearing and their investments in the predivorce family. Previous studies suggest that having older children increases fathers' chances of seeking custody (Weitzman 1985), perhaps because fathers and older children have a longer history of sharing their lives. However, I find little difference by custody type in the ages or number of children involved in the divorce case (table 1).²⁰

Aspects of the divorce process also affect child support and custody outcomes. When both parents are represented by attorneys, the parties may be somewhat more likely to seek joint custody. Divorce cases in which only the mother is represented are more likely to be cases in which the father has deserted the family than cases in which both parents have legal representatives. In addition, parents who are concerned about maintaining an equal division of joint investments, including investments in children, are likely to seek legal advice as a way of insuring their rights in a divorce settlement.

Finally, the analysis of child-support payments includes a variable

²⁰ This analysis does not consider whether families are more likely to arrange for joint custody when sons are involved than daughters. The court records do not include this information.

indicating whether child support is collected through immediate income withholding. Immediate withholding is a collection procedure in which child-support payments are automatically deducted from the nonresident parent's income as soon as a child-support award is established. Cases with awards administered by automatic withholding show higher payment rates than those in which nonresident parents themselves pay support through the clerk of courts (Garfinkel 1986).²¹ Table 1 shows that cases with automatic withholding occur at about the same rate, approximately 17%, regardless of custody type.

ANALYSIS PLAN

The conceptual model that informs this analysis is summarized in figure 1. I follow the convention of indicating causation by straight arrows and correlation by curved arrows. The diagram does not summarize hypotheses about custody differences in the effects of the independent variables on payments. The figure shows that child-support payments depend on family characteristics, legal custody arrangements, and child-support awards. I present the analysis in two parts to take account of the intervening process in which custody and support awards are established. The first part investigates this association between joint legal custody and the amount of child support awarded at divorce. I estimate two equations for the effects of family and case characteristics on custody and child-support awards. The model recognizes the joint determination of custody and child-support decisions by allowing the disturbances for the custody and support-award equations to be correlated. The analysis of custody and child-support awards investigates whether families with joint legal custody have higher awards than those with mother custody. If so, custody differences in child-support awards may explain higher support payments among families with joint custody. The second part of the analysis examines the effects of joint legal custody on the amount of child support paid among families with child-support awards. It develops models of payments that take into account the hypothesis that the effects

²¹ The effects of the collection procedure on payments can also be assessed by including two variables for the amount of support owed. One measures the amount owed through automatic withholding, and the other measures the amount owed through nonresident parents' direct payments to the clerk of courts. This procedure assumes that each case with an award uses only one collection procedure. Therefore, cases that pay the clerk of courts directly take the value zero on the variable for the amount owed through withholding, and vice versa. This assumption is reasonable, according to informants in Wisconsin child-support offices. The results of analyses using this alternate specification for the collection procedure are consistent with the results and conclusions about child-support payments reported below.

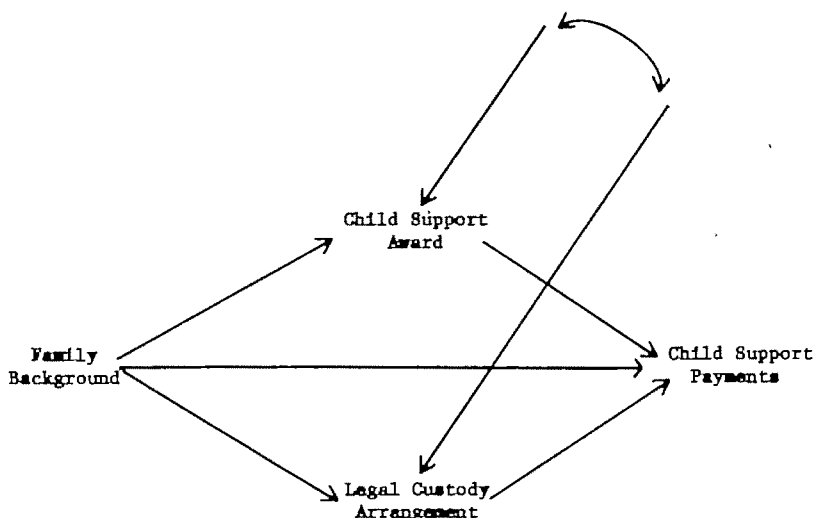


FIG. 1.—Schematic diagram of the relationships among legal custody arrangements, child-support awards, and child-support payments.

of parents' income, award amounts, and family structure may vary by legal custody type.

Because custody is a dichotomous variable in this analysis, the custody equation is estimated by a probit analysis (Aldrich and Nelson 1984). Both of the child-support variables, amount of support awarded at divorce and amount paid after divorce, are censored at the lower bound, zero. The analysis uses Tobit analysis to evaluate the linear effects of the independent variables on support practices while taking into account the censored distributions on the dependent variables (Maddala 1983). Parameter estimates from Tobit models can be interpreted like OLS regression coefficients, the net change in the latent dependent variable expected per unit change in the independent variable. Two-equation models including Tobits are estimated in HOTZTRAN (Avery and Hotz 1985), and single-equation models are estimated in LIMDEP (Greene 1988) with maximum-likelihood procedures.

RESULTS: CUSTODY CHOICES AND CHILD-SUPPORT AWARDS

Table 2 shows the determinants of joint legal custody and the amount of child support awarded at divorce as well as the joint association between custody and child support. The multivariate analysis shows that the relationships between family characteristics and joint custody are generally

TABLE 2

ESTIMATES OF THE EFFECTS OF FAMILY AND CASE CHARACTERISTICS ON THE AMOUNT OF SUPPORT OWED AND JOINT LEGAL CUSTODY WHEN MOTHERS HAVE PHYSICAL CUSTODY

INDEPENDENT VARIABLES	DEPENDENT VARIABLES	
	Amount Owed (thousands of dollars)	Joint Legal Custody (1 if yes)
Father's annual income (thousands of dollars) .....	.186* (.454 × 10 ⁻³)	.139 × 10 ^{-1a} (.259 × 10 ⁻³)
Mother's annual income (thousands of dollars)	- .782 × 10 ^{-1a} (.101 × 10 ⁻¹)	-.891 × 10 ⁻³ (.602 × 10 ⁻³)
Number of children ..	.829* (.143)	.0003 (.035)
Number of children, squared .....	.074* (.026)	..
Age of eldest minor child (years) ....	...	.002 (.006)
Marital duration (years) .....	.042* (.007)	...
Both parents have lawyers (1 if yes)	.489* (.095)	.089 (.057)
Father's income missing (1 if yes) ..	- 1.16* (.110)	- .348* (.076)
Mother's income missing (1 if yes) ...	.515* (.121)	.046 (.077)
σ	2.88* (.034)	1.00
ρ, partial .....		.024 (.024)
ρ, zero-order .....		.137* (.022)
- 2 × log likelihood	18,991.2	
Number of parameters	69	
Number of cases	3,527	

SOURCE.—Wisconsin Court Record Database, cases that entered court 1980-85.

NOTE.—Parameters for 1 (amount owed) are Tobit coefficients; parameters for eq. (2) (joint legal custody) are probit coefficients. The equations are estimated simultaneously with correlated errors. Models include controls for county and year of data collection. SEs are in parentheses. Ellipses indicate that the variable was omitted from the equation.

* The parameter is at least twice its SE.

consistent with the patterns in table 1.²² When fathers have higher incomes, the probability of joint legal custody increases. Father's income also increases the amount of child support owed. Mother's income does not affect custody, perhaps because her income reflects two phenomena. On the one hand, mothers with higher incomes may use their economic resources to seek sole legal custody. On the other hand, mother's income may reflect an effect of education. Perhaps as a result of more egalitarian gender-role attitudes (Mason and Lu 1988), mothers with higher educations may be more willing to involve fathers in postdivorce child rearing through joint custody than mothers with less education. In accordance with findings from previous research, mother's higher income diminishes the amount of her child-support award. Each \$1,000 of mother's annual income decreases the amount of support awarded annually by nearly \$80, while each \$1,000 of father's income increases the award by about \$190, other things being equal. The negative association between mother's income and the amount of child support awarded may reflect parents' and judges' belief that mothers with their own incomes can afford to support their children by themselves or "need" less child support.

Cases without information on father's income are more likely to have awarded mothers sole legal custody than to have awarded joint legal custody. Missing information on father's income may be more common in cases in which the father does not appear at the divorce hearing than those in which both parents are present. When one parent does not appear, the other is more likely to receive legal custody of the children. In cases of desertion, the children are already in the mother's physical custody. For the same reasons, cases with missing information on father's income also have lower child-support awards.

When both parents have attorneys, child-support awards are higher. The number of children in the family increases the amount of child support awarded but at a rate that diminishes the more children there are. The number and age of children may not affect joint legal custody because the analysis controls for physical custody. Children's ages are more

²² Examination of residuals indicated that the results of preliminary analyses depended on a few cases with extreme values on key independent variables, such as parents' incomes. The results reported here use data in which extreme outliers were recoded to lower values that maintained the rank order of observations but provided more reasonable tails on the univariate distributions. The variables and number of values affected include four cases on father's income, seven cases on mother's income, and one case on the amount of support owed. This truncation does not bias the parameter estimates and provides more stable results than was possible with the original variables. The analysis that predicts the amount of support owed does *not* use the truncated variable because truncating the dependent variable provides biased parameter estimates; when amount owed is an independent variable, I use the truncated variable.

important predictors of physical custody than of legal custody (Seltzer 1990).

The results in table 2 show that SES affects legal custody type as well as the amount of child support awarded at divorce. That a nonresident father's higher income increases the chance of joint legal custody as well as raises child-support awards accounts for most of the positive association between custody and child-support awards. The zero-order association between legal custody and the amount of child support awarded is .137. Once common predictors such as income are taken into account, there is still a very small positive residual association between joint legal custody and the amount of child support awarded ($p = .024$), but the association is no longer statistically significant. These findings suggest that families with joint legal custody receive higher support awards because the fathers in these families have higher incomes. Once differences in income are taken into account, the difference in the amount of support awarded to families in which mothers have sole legal custody and in those in which parents share legal custody is not statistically significant.²³

RESULTS: EFFECTS OF JOINT CUSTODY ON CHILD-SUPPORT PAYMENTS

When parents share legal custody, the average amount of child support that nonresident fathers pay is about \$550 more per year than when the mother has sole legal custody (table 1). Differences in the amount of support paid may be due, in part, to the higher incomes and awards of fathers in joint-custody families. I have already shown in table 2 that differences in the amount of support owed can be attributed largely to the higher incomes of fathers with joint legal custody. In addition to compositional effects, joint custody may itself increase nonresident fathers' incentive to pay support or increase the benefits fathers derive from each additional contribution they make to child support (Weiss and Willis 1985). Joint custody may also enhance the effects of SES and family composition and may diminish the legal constraint of the amount of support owed.

Determinants of Child-Support Payments

Preliminary analyses of custody effects on child-support payments indicate several important interactions between custody type and family

²³ Analyses not reported here also show that custody differences in parents' incomes explain the higher probability of having a child-support award among joint-custody families than among families in which mothers have sole legal custody.

TABLE 3

TOBIT ESTIMATES OF THE EFFECTS OF FAMILY AND CASE CHARACTERISTICS ON AMOUNT
OF SUPPORT PAID IN FIRST YEAR BY LEGAL CUSTODY

INDEPENDENT VARIABLE	TYPE OF LEGAL CUSTODY		TEST OF DIFFERENCE IN COEFFICIENTS
	Joint	Mother	
Father's annual income (thousands of dollars) ...	$.377 \times 10^{-1*}$ (.125 $\times 10^{-2}$)	$.184 \times 10^{-1*}$ (.249 $\times 10^{-2}$)	*
Mother's annual income (thousands of dollars) ...	$-.628 \times 10^{-1*}$ (.244 $\times 10^{-2}$)	$-.342 \times 10^{-1*}$ (.809 $\times 10^{-2}$)	*
Number of minor children	.203 (.501)	.037 (.100)	N.S.
Number of minor children, squared.....	.027 (.107)	.018 (.016)	N.S.
Father's income missing (1 if yes)	-.379 (.346)	-.636* (.096)	N.S.
Mother's income missing (1 if yes)	-.294 (.342)	.183 (.095)	N.S.
Payments automatically withheld (1 if yes).....	.663* (.311)	.349* (.129)	N.S.
Number of months of pay- ment data.	-.044 (.057)	-.063* (.018)	N.S.
Amount of support award (thousands of dollars) ...	.405* (.040)	.533* (.006)	*
Constant .. .....	.328 (1.04)	.929* (.294)	
σ	2.63* (.086)	1.78* (.011)	*
$-2 \times \log \text{likelihood}$	2,525.4	8,962.0	
Number of cases	576	2,356	

SOURCE.—Wisconsin Court Record Database, cases that entered court 1980-85

NOTE.—Sample restricted to cases with child-support awards. Models include controls for county and year of data collection. The criterion for statistical significance in tests of differences across models is an interaction term with a coefficient at least twice its SE. SEs are in parentheses.

* Coefficient is at least twice its SE.

characteristics. Therefore, the results of the Tobit models of child-support payments are reported separately for each legal custody type in table 3. The table indicates the coefficients that differ across custody types at a statistically significant level, that is, where the interaction coefficient in the pooled model is at least twice its standard error (SE).

The amount of support awarded has a large positive effect on the amount of support paid among families with both types of legal custody. The magnitude of the coefficient for the effect of awards on payments indicates that a \$1,000 change in the amount of support awarded increases payments by \$400–\$530 a year. The effect of the amount of the award reflects, in part, constraints imposed by the legal system. Child-support awards also reflect an indirect effect of parents' incomes (table 2). That the coefficients for the amount of support owed are much less than 1 implies that compliance with support awards is much less than perfect.

When the amount of child support that fathers owe is taken into account, parents' incomes at divorce still affect the amount of support that mothers receive in the first year after divorce. Fathers' financial resources affect their ability to pay, while mothers' resources reflect children's need for support. Incomes have an independent effect on payments even after I control for the amount of the child-support award because awards do not correspond perfectly to either fathers' ability and motivation to pay or to children's needs. In addition, income effects may reflect educational differences in parents' commitment to children and their preferences about how to manage child-rearing responsibilities after divorce. For example, father's education may be positively associated with the desire to remain involved with his children. Father's income increases the amount of support paid, while mother's income decreases payments (table 3). Among families with joint custody, a \$1,000 increase in father's income raises payments by nearly \$38 a year, when other factors are held constant; the same increase in income for mothers decreases child-support payments by \$63. Within each custody type, an increase in mother's income reduces the amount of support she receives by nearly twice as much as the rise in payments from a comparable increase in father's income, when other factors are held constant. This pattern is the opposite of that in table 2 in which father's income has a much larger effect than mother's income on the amount of child support awarded. When both direct and indirect effects of incomes are taken into account, the data show that father's income increases payments slightly more than mother's income decreases them for both legal custody types. For families with joint custody, the total effect on payments of father's annual income is to increase payments by \$113 for every \$1,000 of income (.186 [.405])

+ .038); the total effect of mother's income is to decrease payments by \$94 per \$1,000 of her income. For families in which mothers have sole custody, the total effect of a \$1,000 increase in father's income raises payments by \$118, while a comparable increase in mother's income decreases payments by \$76 a year. That father's income is a more important predictor of child-support payments than is mother's income suggests that his ability to pay is more important than children's needs for support.

Another measure of the need for child support, number of children in the family, increases the amount of support paid, but the increase is not statistically significant.²⁴ This finding contrasts with the effects of number of children on the amount of support awarded (see table 2). The data show that the number of children covered by a child-support award affects payments indirectly but not directly.

The collection procedure affects the amount of child support paid. Families in which child support is automatically withheld from the non-resident father's earnings pay more support than those in which fathers pay the support themselves. Finally, the data suggest a small reduction in payments toward the end of the first year after divorce. Fathers in cases observed for the full 12-month period pay slightly less support than those observed for part of the period.²⁵ The decline in payments over time is only statistically significant among families in which mothers have sole legal custody.

These results show that child-support payments depend on the legal constraints of a child-support award, parents' resources, and children's needs. The most striking finding is that the direct effect of mother's income on payments is larger than the effect of father's income when the analysis controls for awards. However, once the effects of parents' incomes on awards are taken into account, the total effect of father's income exceeds the total effect of mother's income, regardless of custody type. This suggests that father's ability and motivation to provide support are more important in determining child-support payments than is mother's need for support, although mother's income probably does not

²⁴ When the quadratic term is omitted from the model, the coefficient for number of children becomes statistically significant among families in which mothers have sole legal custody but remains insignificant among those with joint legal custody.

²⁵ Annual payments for cases with less than a full year of payment data were imputed with the assumption that payments in the second part of the year would follow the same pattern as payments in the first part of the year. The negative coefficient for the effect of number of months of payment information suggests that this imputation procedure overestimates the amount of support paid because payments decline over time.

index economic need as well as father's income indexes his ability to pay. That father's income has a bigger total effect on child-support payments is also consistent with mother's larger in-kind contributions to child care. However, the total effect of father's income on child-support payments is small.

Interactions between Custody and the Determinants of Payments

While the general pattern of effects of family and legal characteristics on payments is similar across custody types, the magnitude of effects differs considerably between families with joint legal custody and those with sole-mother custody. Parents' incomes have bigger effects on payments among families with joint legal custody. The coefficients on parents' incomes are approximately twice as large for cases with joint custody as for those with mother custody. In contrast, the amount of child support awarded affects payments more among those with sole-mother custody than those with joint custody. These differences across legal custody types are statistically significant. Fathers with joint legal custody appear to use more discretion concerning how much money to invest in children than fathers without custody. That the amount of child support awarded has a stronger effect on payments among families with mother custody also supports the view that fathers with joint legal custody are less constrained by the legal restrictions of child-support obligations.

These results imply that there is no important main effect of legal custody arrangement on the amount of support paid. Families with sole-mother custody and those with joint legal custody do not differ in the mean amount of child support paid in the year after divorce, once other factors are taken into account. The higher average payments that other studies have found among families with joint legal custody may be attributed to the absence of adequate controls for socioeconomic differences across custody types.

Custody differences in the effects of fathers' and mothers' incomes on payments can be seen more clearly in a simulation. I predict the amount of child support that fathers in each custody type will pay for families with various combinations of father's and mother's incomes in table 4. The simulation uses coefficients from the within-custody-type models summarized in table 3. Income levels for parents are defined in the notes to table 4. The table refers to "high," "average," and "low" incomes of fathers and mothers compared with the incomes of other fathers and mothers, respectively. The simulation uses a different standard to define fathers' and mothers' income levels to take account of sex differences in the distributions of income in this subsample. Other variables are evalu-

TABLE 4
SIMULATION OF ANNUAL CHILD-SUPPORT PAYMENTS BY CUSTODY TYPE

FAMILY CHARACTERISTICS	TYPE OF LEGAL CUSTODY		DIFFERENCE IN PAYMENTS (Joint - Mother)	INCOME RATIO (Mother/Father)
	Joint (\$)	Mother (\$)		
All characteristics at sample means	2,263	2,219	44	.49
Father's income high, mother's income high	2,514	2,328	186	.40
Father's income high, mother's income average	2,726	2,473	253	.25
Father's income high, mother's income low	2,972	2,621	351	.11
Father's income average, mother's income high	2,044	2,078	-34	.78
Father's income average, mother's income low	2,499	2,363	136	.21
Father's income low, mother's income high	1,905	1,998	-93	1.13
Father's income low, mother's income average	2,118	2,137	-19	.71
Father's income low, mother's income low	2,341	2,277	64	.30

NOTE.—Parameters used in calculations come from within-group models summarized in table 3. Sample is restricted to cases with support awards. Income data refer to incomes at the time of divorce. Father's income and mother's income are evaluated at different levels. Other characteristics are held at the means for the pooled sample. Income levels are defined as high = 1.5 SD above the sample mean for cases with awards for fathers (\$31,915), 1 SD above the sample mean for mothers (\$12,790). Average = sample mean (\$16,501 for fathers, \$8,096 for mothers). Low income = .5 SD below the mean for fathers (\$11,363), 1 SD below the mean for mothers (\$3,402).

ated at the means for the pooled sample.²⁶ Figure 2 depicts the effects on child-support payment of parents' incomes for each custody type as shown in table 4.

The figure illustrates that father's income has a bigger effect on child-support payments among families with joint legal custody than among those with sole-mother custody. The figure shows that the distances between amounts of support paid by fathers with high and low incomes are greater for fathers with joint custody than for those with mother custody at each level of mother's income. In other words, the dispersion or inequality in child-support payments is greater among families with

²⁶ The means used in these calculations are for the subsample of cases with child-support awards. The means differ slightly from those reported in the first column of table 1 for all cases regardless of award status.

Custody and Children's Economic Welfare

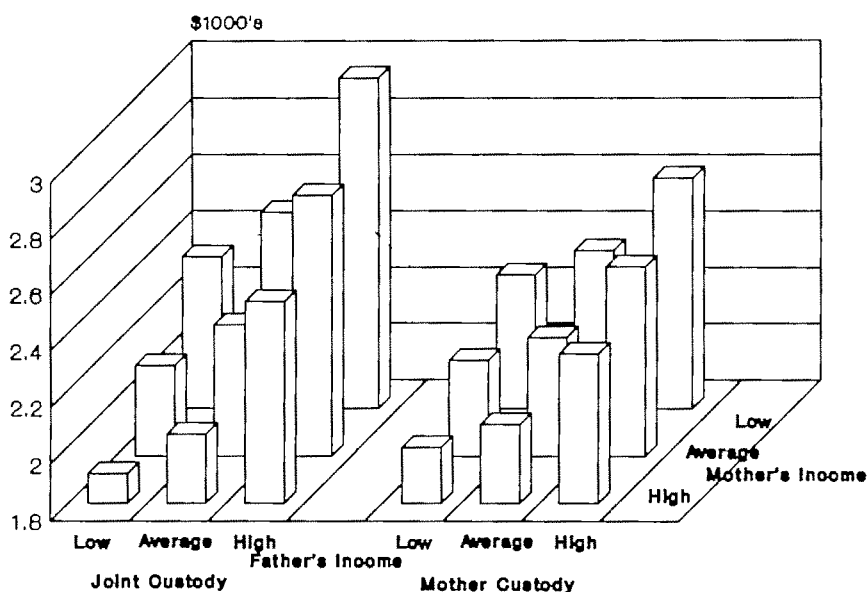


FIG. 2.—Effects of parents' incomes on child-support payments by custody type.

joint legal custody than among those with mother custody. Within categories of mother's income, fathers with joint custody who have high incomes pay approximately \$610 more in child support per year than those with low incomes. (Compare annual payments in col. 1 of table 4: \$2,514–\$1,905; \$2,726–\$2,118; \$2,972–\$2,341.) Among families in which mothers have sole custody, the difference in payments between fathers with high and low incomes is about \$330. (Compare payments in col. 2 of table 4: \$2,328–\$1,998; \$2,473–\$2,137; \$2,621–\$2,277.) The custody difference in the effects of father's income on payments is approximately \$280, considerably more than the average amount of child support paid per month among the families in which mothers have sole custody.²⁷

Especially when fathers have high incomes, those with joint custody pay more child support than those without custody. Fathers with high incomes pay between \$350 and \$190 more per year in child support when they have joint legal custody (table 4, col. 3). Among families in which

²⁷ Table 1 above shows that fathers without custody pay \$2,091 per year in child support when they have an award. This implies monthly payments of about \$174. The custody difference in the effects of father's income is also larger than the average monthly payment among fathers with joint custody. Fathers with joint legal custody pay an average of \$2,641 annually, implying monthly payments of \$220.

the fathers have lower incomes, the custody difference in support payments diminishes and in some cases reverses, giving a slight advantage to children in families with mother custody.

When both parents have average incomes, there is a very slight economic advantage for children whose parents have joint legal custody (table 4). Nonresident fathers with joint custody pay \$44 more per year in child support than do fathers in families with sole-mother custody.²⁸ The economic advantage to children of joint legal custody increases when fathers have high incomes and when fathers' incomes are high relative to mothers' incomes.

Children whose parents have joint legal custody appear to benefit more from their fathers' higher income than children in mother-custody families. These data also show that the economic benefits to children of joint legal custody depend on their mother's income. In particular, when her income is high relative to father's income, children benefit more from mother custody than from joint legal custody. The last column of table 4 shows the ratio of mother's income to father's at divorce. When mother's income is high relative to father's, the joint-custody advantage reverses, so that fathers with joint legal custody pay less child support on average than those in families with mother custody. For example, when mother's income is higher than father's income, fathers pay nearly \$100 less child support annually among families with joint custody than among those in which mothers have custody (\$1,905 vs. \$1,998). As the ratio of mother's income to father's declines, joint custody provides more financial benefits to children. These findings suggest that inequality in parents' resources affects the consequences of legal custody decisions for child-support payments. When fathers have more economic resources relative to mothers, fathers may use these resources to acquire rights to children through joint legal custody. Once they have legal custody rights, joint custody may encourage fathers to invest more in their children than fathers who are not legal custodians. However, when mothers have high incomes relative to fathers, joint legal custody is associated with lower child-support payments. That the economic benefits to children of joint custody depend on inequality in parents' resources suggests that mothers' interests and children's interests do not always coincide.

These results also show that custody effects on child-support payments are relatively small compared with the total amounts paid. Custody differences in payments are very small compared with the costs of raising

²⁸ The difference between the mean support payments predicted in this simulation and the observed means reported in table 1 occurs because the simulated means assume that the independent variables for both custody types are at the pooled sample means. In addition, the simulation takes into account the distribution of the latent payment variable to correct for censoring (McDonald and Moffitt 1980).

children²⁹ or with nonresident fathers' incomes. Fathers with joint legal custody who have high incomes and were married to women who had low incomes at divorce pay \$2,972 a year in regular child-support payments. This is only about 12% more than the average amount that fathers without custody would pay under the same income conditions (\$2,621, a difference of \$351). Thus, while joint legal custody may be in children's economic interest when fathers have high incomes, both absolutely and relative to mothers, the benefit is worth less than \$30 a month in regular child-support payments. Nevertheless, because annual child-support payments are so low, the financial benefits to joint custody may be equivalent to more than one month's worth of regular payments.

The results described thus far are consistent with the view that joint legal custody facilitates fathers' discretion about investments in child care. Greater discretion results in inequality in child-support payments, much of it attributable to variation among families in measured characteristics, particularly parents' incomes. Joint legal custody may also increase inequality among children in unmeasured ways. Annual child-support payments vary more widely among families with joint legal custody than among families in which mothers have sole legal custody, even after differences in parents' SES and child-support awards are taken into account. A comparison of data in tables 1 and 3 shows that measured characteristics reduce the variability in payments within custody types but do not alter the ratio of variation between custody types. Table 3 shows that the standard error of estimate (σ) for the joint custody equation is 2.63, or \$2,630 of child support, compared with 1.78, or \$1,780, for families with mother custody. This ratio, 1.48, is approximately equal to the ratio of the SDs in amount of support paid, 1.52, shown in columns 2 and 3 of table 1 (3.711/2.445). That the greater variability in payments among families with joint custody persists within levels of parents' incomes further supports the view that joint legal custody may encourage fathers to make child-support contributions contingent on their own personal circumstances.

CONCLUSION

These findings show the importance of parents' SES in determining legal custody and child-support obligations at the time of divorce. Fathers with higher incomes are more likely to acquire joint legal custody at

²⁹ Espenshade (1984) estimates that a middle-income family with two children and a wife who works part time spends \$82,400 to raise a child to age 18 (in 1981 dollars). This estimate does not include the indirect costs of raising a child, including income forgone as a result of providing housework and child-care services.

divorce than those with lower incomes, when mothers' income and various other family characteristics are taken into account. Families with joint legal custody have higher average child-support awards than those with mother custody, but income differences between families with different custody arrangements explain the higher support awards associated with joint legal custody.

The effects of custody on child-support payments are more complex. Families with joint legal custody and those in which mothers have sole legal custody do not differ in the level of support paid after divorce, once other factors are taken into account. The legal custody arrangement does, however, affect the determinants of child-support payments. Compared to mother-custody families, when parents have joint legal custody, child-support payments are more responsive to fathers' and mothers' incomes, and payments are less responsive to the legal constraints of child-support awards. My findings also show that even after differences in measured characteristics are taken into account, child-support payments are more variable among families with joint custody than among those with sole-mother custody.

The greater variability in payments associated with both measured and unmeasured characteristics supports the view that joint custody increases parents' discretion about how much child support to pay. However, the greater variation in payments may also reflect greater heterogeneity among families who adopt joint legal custody. Families with joint custody may adopt this arrangement because they prefer to cooperate in child rearing after divorce or as a solution to conflict about which parent should get sole custody of the children. Whether parents seek joint custody voluntarily or accept it as an unhappy compromise is an unmeasured source of variation in child-support payments. Unfortunately, we have no direct evidence about parents' preferences concerning legal custody and how these vary among families whose divorce settlements allocate custody to both parents or to only one.

While these data show that children benefit economically from joint legal custody when their fathers have high incomes, they also show that the benefits are small. The data used in this analysis, however, may underestimate custody differences in child-support payments because official court records do not document such informal transfers as gifts and payments to third parties (e.g., payments for dental care and school fees). Fathers with joint legal custody are probably more likely to contribute informally than those without custody. Similarly, when parents have joint legal custody, children may be more likely to spend extended periods of time in their father's household even though they spend most of the year with their mother. The court records of child-support payments, therefore, are likely to underestimate the effects of joint legal custody

on child-support payments. As a result, these data may underestimate inequality among children in single-mother households.

In the absence of additional information, the findings reported here suggest that by strengthening the formal ties between nonresident fathers and children, joint legal custody may make divorced families more similar to families in which children live with both parents. Recognition of paternal rights may facilitate fathers' informal involvement in child rearing and provide fathers with more opportunity to share financial resources with their children. In addition, joint legal custody permits fathers to have greater flexibility about how to fulfill their economic responsibilities to children. This also increases similarities between children in single-parent households and those in two-parent households because fathers whose children live with them have much latitude in decisions about how to invest in children (Espenshade 1984; Lazear and Michael 1988). Thus joint legal custody may increase equality between children from single- and two-parent households at the same time that these closer ties between divorced fathers and children decrease equality (i.e., increase variation) among all children who live with single mothers.

REFERENCES

- Aldrich, John H., and Forrest D. Nelson. 1984. *Linear Probability, Logit, and Probit Models*. Beverly Hills, Calif.: Sage.
- Alwin, Duane F. 1984. "Trends in Parental Socialization Values: Detroit, 1958-1983." *American Journal of Sociology* 90:359-82.
- Angel, Ronald, and Jacqueline Lowe Worobey. 1988. "Single Motherhood and Children's Health." *Journal of Health and Social Behavior* 29:38-52.
- Arendell, Terry. 1986. *Mothers and Divorce: Legal, Economic, and Social Dilemmas*. Berkeley and Los Angeles: University of California Press.
- Avery, Roger B., and V. Joseph Hotz. 1985. "HOTZTRAN User's Manual." Unpublished manuscript. Economic Research Center, NORC, Chicago.
- Beller, Andrea H., and John W. Graham. 1986. "The Determinants of Child Support Income." *Social Science Quarterly* 67:353-64.
- California Senate. Task Force on Family Equity. 1987. *Final Report*. Sacramento, Calif., June.
- Casetty, Judith. 1978. *Child Support and Public Policy: Securing Support from Absent Fathers*. Lexington, Mass: Lexington.
- Chambers, David L. 1979. *Making Fathers Pay*. Chicago: University of Chicago Press.
- Cherlin, Andrew J., and Pamela Barnhouse Walters. 1981. "Trends in United States Men's and Women's Sex-Role Attitudes." *American Sociological Review* 46:453-60.
- Del Boca, Daniela. 1986. "Children as Public Goods: An Economic Approach to Child Support Payments in Relation to the Custody Decision." Discussion Paper 820-86. University of Wisconsin-Madison, Institute for Research on Poverty.
- Dornbusch, Sanford M., J. Merrill Carlsmith, Steven J. Bushwall, Philip L. Ritter, Herbert Leiderman, Albert H. Hastorf, and Ruth T. Gross. 1985. "Single Parents, Extended Households, and the Control of Adolescents." *Child Development* 56:326-41.

- Duncan, Beverly, and Otis Dudley Duncan. 1969. "Family Stability and Occupational Success." *Social Problems* 16:273-85.
- Duncan, Greg J. 1988. "The Economic Environment of Childhood." Paper presented at the conference "Poverty and Children," Lawrence, Kans.
- Espenshade, Thomas J. 1984. *Investing in Children: New Estimates of Parental Expenditures*. Washington, D.C.: Urban Institute.
- Felner, Robert D., and Lisa Terre. 1987. "Child Custody Dispositions and Children's Adaptation Following Divorce." Pp. 106-53 in *Psychology and Child Custody Determinations: Knowledge, Roles, and Expertise*, edited by Lois A. Weithorn. Lincoln: University of Nebraska Press.
- Fineman, Martha. 1988. "Dominant Discourse, Professional Language, and Legal Change in Child Custody Decisionmaking." *Harvard Law Review* 101:727-74.
- Freed, Doris Jonas, and Timothy B. Walker. 1987. "Family Law in the Fifty States." *Family Law Quarterly* 20:439-587.
- Fuchs, Victor R. 1974. *Who Shall Live? Health, Economics, and Social Choice*. New York: Basic.
- Furstenberg, Frank F., Christine Winquist Nord, James L. Peterson, and Nicholas Zill. 1983. "The Life Course of Children of Divorce." *American Sociological Review* 48:656-68.
- Gamoran, Adam, and Robert D. Mare. 1989. "Secondary School Tracking and Educational Inequality: Compensation, Reinforcement, or Neutrality." *American Journal of Sociology* 94:1146-95.
- Garfinkel, Irwin. 1986. "Utilization and Effects of Immediate Income Withholding and the Percentage-of-Income Standard." Special Report 42, University of Wisconsin—Madison, Institute for Research on Poverty.
- . 1988. "Child Support Assurance: A New Tool for Achieving Social Security." Pp. 328-42 in *Child Support: From Debt Collection to Social Policy*, edited by Alfred J. Kahn and Sheila B. Kamerman. Newbury Park, Calif.: Sage.
- Garfinkel, Irwin, Thomas J. Corbett, Maurice MacDonald, Sara McLanahan, Phillip K. Robins, Nora Cate Schaeffer, and Judith A. Seltzer. 1988. "Evaluation Design for the Wisconsin Child Support Assurance Demonstration." Report produced under contract with the Wisconsin Department of Health and Social Services. University of Wisconsin—Madison, Institute for Research on Poverty.
- Garfinkel, Irwin, and Elizabeth Uhr. 1984. "A New Approach to Child Support." *The Public Interest* 75:111-22.
- Goldstein, Joseph. 1984. "In Whose Best Interest?" Pp. 47-55 in *Joint Custody and Shared Parenting*, edited by Jay Folberg. Washington, D.C.: Bureau of National Affairs, Association of Family and Conciliation Courts.
- Greene, William H. 1988. *LIMDEP: Version 5*. New York: William H. Greene.
- Hetherington, E. Mavis, Martha Cox, and Roger Cox. 1979. "Play and Social Interaction in Children Following Divorce." *Journal of Social Issues* 35:26-49.
- . 1982. "Effects of Divorce on Parents and Children." Pp. 233-88 in *Nontraditional Families*, edited by M. E. Lamb. Hillsdale, N.J.: Erlbaum.
- Heyns, Barbara. 1978. *Summer Learning and the Effects of Schooling*. New York: Academic Press.
- Hill, Martha S. 1985. "Child Support: What Absent Fathers Do and Could Provide." Paper presented at the annual meetings of the Population Association of America, Boston.
- . 1988. "The Role of Economic Resources and Dual-Family Status in Child Support Payments." Paper presented at the annual meetings of the Population Association of America, New Orleans, April. Revised, May.
- Hoffman, Saul D., and Greg J. Duncan. 1988. "What Are the Economic Consequences of Divorce?" *Demography* 25:641-45.

- Ilfeld, Frederic W., Jr., Holly Zingale Iffeld, and John R. Alexander. 1984. "Does Joint Custody Work? A First Look at Outcome Data on Relitigation." Pp. 136-41 in *Joint Custody and Shared Parenting*, edited by Jay Folberg. Washington, D.C.: Bureau of National Affairs, Association of Family and Conciliation Courts.
- Jencks, Christopher, Susan Bartlett, Mary Corcoran, James Crouse, David Eaglesfield, Gregory Jackson, Kent McClelland, Peter Mueser, Michael Olneck, Joseph Schwartz, Sherry Ward, and Jill Williams. 1979. *Who Gets Ahead? Determinants of Economic Success in America*. New York: Basic.
- Koel, Amy, Susan C. Clark, W. P. C. Phear, and Barbara B. Hauser. 1988. "A Comparison of Joint and Sole Legal Custody Agreements." Pp. 73-90 in *Impact of Divorce, Single Parenting, and Stepparenting on Children*, edited by E. Mavis Hetherington and Josephine D. Arasteh. Hillsdale, N.J.: Erlbaum.
- Kohn, Melvin L. 1977. *Class and Conformity: A Study in Values*, 2d ed. Chicago: University of Chicago Press.
- Lazear, Edward P., and Robert T. Michael. 1988. *Allocation of Income within the Household*. Chicago: University of Chicago Press.
- Maccoby, Eleanor R., Charlene E. Depner, and Robert H. Mnookin. 1988. "Custody of Children Following Divorce." Pp. 91-114 in *Impact of Divorce, Single Parenting, and Stepparenting on Children*, edited by E. Mavis Hetherington and Josephine D. Arasteh. Hillsdale, N.J.: Erlbaum.
- MacDonald, Maurice. 1986. "Objectives, Procedures, and Sampling Results for CHIPPS." Unpublished manuscript. University of Wisconsin—Madison, Institute for Research on Poverty.
- Maddala, G. S. 1983. *Limited-Dependent and Qualitative Variables in Econometrics*. Cambridge: Cambridge University Press.
- Mason, Karen Oppenheim, and Yu-hsia Lu. 1988. "Attitudes toward Women's Familial Roles: Changes in the United States, 1977-1985." *Gender and Society* 2:39-57.
- Matsueda, Ross L., and Karen Heimer. 1987. "Race, Family Structure, and Delinquency." *American Sociological Review* 52:826-40.
- McDonald, John F., and Robert A. Moffitt. 1980. "The Uses of Tobit Analysis." *Review of Economics and Statistics* 62:318-21.
- McLanahan, Sara. 1985. "Family Structure and the Reproduction of Poverty." *American Journal of Sociology* 90:873-901.
- . 1989. "The Two Faces of Divorce. Women's and Children's Interests." Paper presented at the annual meeting of the American Sociological Association, San Francisco.
- McLanahan, Sara, and Larry Bumpass. 1988. "Intergenerational Consequences of Family Disruption." *American Journal of Sociology* 94:130-52.
- McLendon, James B. 1987. "Separate but Unequal: The Economic Disaster of Divorce for Women and Children." *Family Law Quarterly* 21:351-409.
- Medrich, Elliott A., Judith A. Rolzen, Victor Rubin, and Stuart Buckley. 1983. *The Serious Business of Growing Up: A Study of Children's Lives Outside of School*. Berkeley and Los Angeles: University of California Press.
- Mnookin, Robert H., and Lewis Kornhauser. 1979. "Bargaining in the Shadow of the Law." *Yale Law Journal* 88:950-97.
- Novinson, Steven L. 1983. "Post-divorce Visitation: Untying the Triangular Knot." *University of Illinois Law Review* 1983:121-200.
- O'Neill, June. 1985. "Determinants of Child Support." Unpublished report. Washington, D.C., Urban Institute.
- Pearson, Jessica, and Nancy Thoennes. 1985. "Child Custody, Child Support Arrangements and Child Support Payment Patterns." *Juvenile and Family Court Journal* 36:49-56.

- . 1988. "Supporting Children after Divorce: The Influence of Custody on Support Levels and Payments." *Family Law Quarterly* 22:319-39.
- Peterson, James L., and Christine Winquist Nord. 1987. "The Regular Receipt of Child Support: A Multistep Process." Unpublished report prepared by Child Trends, Inc. Washington, D.C., Office of Child Support Enforcement.
- Peterson, James L., and Nicholas Zill. 1986. "Marital Disruption and Behavior Problems in Children." *Journal of Marriage and the Family* 48:295-307.
- Phear, W. Patrick C., James C. Beck, Barbara B. Hauser, Susan C. Clark, and Ruth A. Whitney. 1984. "An Empirical Study of Custody Agreements: Joint versus Sole Legal Custody." Pp. 142-156 in *Joint Custody and Shared Parenting*, edited by Jay Folberg. Washington, D.C.: Bureau of National Affairs, Association of Family and Conciliation Courts.
- Roan, Carol Lynn. 1989. "The Relationship between Child Support Awards and Child Support Payments." Master's thesis. University of Wisconsin—Madison, Department of Sociology.
- Rubin, Lillian Breslow. 1976. *Worlds of Pain: Life in the Working-Class Family*. New York: Basic.
- Schaeffer, Nora Cate. 1990. "Principles of Justice in Judgments about Child Support." *Social Forces* 69 (1): 157-79.
- Schepard, Andrew. 1985. "Taking Children Seriously: Promoting Cooperative Custody after Divorce." *Texas Law Review* 64:687-788.
- Schulman, Joanne, and Valerie Pitt. 1982. "Second Thoughts on Joint Child Custody: Analysis of Legislation and Its Implications for Women and Children." *Golden Gate University Law Review* 12:539-77.
- Seltzer, Judith A. 1990. "Legal and Physical Custody in Recent Divorces." *Social Science Quarterly* 71 (2): 250-66.
- Seltzer, Judith A., and Irwin Garfinkel. 1990. "Inequality in Divorce Settlements: An Investigation of Property Settlements and Child Support Awards." *Social Science Research* 19:82-111.
- Seltzer, Judith A., Nora Cate Schaeffer, and Hong-Wen Charng. 1989. "Family Ties after Divorce: The Relationship between Visiting and Paying Child Support." *Journal of Marriage and the Family* 51:1013-31.
- Sewell, William H., and Robert M. Hauser. 1975. *Education, Occupation, and Earnings: Achievement in the Early Career*. New York: Academic Press.
- Stack, Carol B. 1976. "Who Owns the Child? Divorce and Child Custody Decisions in Middle-Class Families." *Social Problems* 23:505-15.
- Steinberg, Laurence. 1987. "Single Parents, Stepparents and the Susceptibility of Adolescents to Antisocial Peer Pressure." *Child Development* 58:269-75.
- Teachman, Jay D., and Karen Polonko. 1989. "Providing for the Children: Socioeconomic Resources of Parents and Child Support in the United States." Paper presented at the Institute for Research on Poverty Small Grants Conference, Madison, Wis.
- U.S. Bureau of the Census. 1989. "Child Support and Alimony: 1985." *Current Population Reports*, ser. P-23, no. 154. Suppl. report. Washington, D.C.: Government Printing Office.
- Wallerstein, Judith S., and Sandra Blakeslee. 1989. *Second Chances: Men, Women, and Children a Decade after Divorce*. New York: Ticknor & Fields.
- Weiss, Yoram, and Robert J. Willis. 1985. "Children as Collective Goods and Divorce Settlements." *Journal of Labor Economics* 3:268-92.
- Weitzman, Lenore J. 1985. *The Divorce Revolution: The Unexpected Social and Economic Consequences for Women and Children in America*. New York: Free Press.
- . 1988. "Child Support Myths and Reality." Pp. 251-76 in *Child Support*:

Custody and Children's Economic Welfare

- From Debt Collection to Social Policy*, edited by Alfred J. Kahn and Sheila B. Kamerman. Newbury Park, Calif.: Sage.
- Wisconsin Statutes. 1985. *Actions Affecting the Child*. Chap. 767.24, 767.29. Madison, Wis.
- . 1987. *Actions Affecting the Child*. Chap. 767.25. Madison, Wis.
- Wolchik, Sharlene A., Sanford L. Braver, and Irwin N. Sandler. 1985. "Maternal versus Joint Custody: Children's Postseparation Experiences and Adjustment." *Journal of Clinical Child Psychology* 14:5-10.

Children and Marital Disruption¹

Linda J. Waite and Lee A. Lillard
RAND Corporation

Children constitute the prime example of "marital-specific capital," a resource worth substantially more inside a marriage than outside it. This article examines the effect of children on marital stability, using data from the Panel Study of Income Dynamics, and tests the propositions that (1) children enhance marital stability, (2) younger children increase stability more than older children, and (3) under some circumstances children have no stabilizing effect or even increase chances that their parents' marriage will end. A proportional hazards model in continuous time is estimated and then modified to accommodate key features of the data. The results indicate that firstborn children increase the stability of marriage through their preschool years. Other children increase marital stability only when they are very young. Older children and children born before marriage significantly increase chances of disruption. The initially stabilizing and later destabilizing effects of children combine over the course of the marriage to give parents only a modestly higher chance than childless couples of reaching their twentieth wedding anniversary.

Children hold a unique position in a marital relationship: they belong to the partnership rather than to either of the individuals. For this reason, children constitute the prime example of "marital-specific capital," a resource worth substantially less outside a particular relationship than in it. According to economic theories of marriage (Becker 1973; Becker, Landes, and Michael 1977), marital-specific capital decreases the probability that a married couple will disrupt their relationship by increasing both the attractiveness of the current marriage and the costs of leaving it. Sociological theories have also focused on the role of children within

¹ This research was supported by grant P-50-HD-12639 from the Center for Population Research, National Institute of Child Health and Human Development, to the Population Research Center, The RAND Corporation. We want to thank Mary Layne and Sharon Rapp for programming and assistance with data preparation and Constantine Panis for development of the statistical software. Requests for reprints should be sent to Linda J. Waite, The RAND Corporation, 1700 Main Street, Santa Monica, California 90406.

marriage, arguing that the presence of children holds marriages together by increasing organic solidarity (Durkheim 1933), and thereby increasing gains from family life (Morgan, Lye, and Condran 1988), or that divorce elicits more normative disapproval toward couples with children than without (see Thornton [1977] for a review of this literature).

However, sociological and economic theories have not systematically treated the conditions under which children stabilize—or even destabilize—marriages. This article develops and tests the hypothesis that the presence of children holds marriages together only under certain circumstances and that children fail to decrease and may even *increase* chances of disruption under other circumstances. The analysis uses information on marriage, children, and marital disruption from a large national survey, the Panel Study of Income Dynamics (PSID), to assess the effect of children and their characteristics on the stability of the first marriages.

EMPIRICAL EVIDENCE

A rich research tradition focuses on the relationship between children and marital disruption. But the relationship is so complex and so dependent on other circumstances that much of the literature addresses a limited part of the problem, uses special samples that cannot be generalized, or ignores the intertwined effects of marital duration and childbearing.

First, couples tend to disrupt marriages more readily in the early years of marriage—exactly the period when rates of childbearing are highest. This association confounds the effects of marital duration with the effects of presence, number, and ages of children (Schoen 1975; Cherlin 1981). Second, the “effect” of children on marital stability actually comprises a number of distinct effects, primarily number of children, ages of children, and timing of births relative to marriage.

Most research to date has examined only one of these effects. For example, Chester (1974) focuses on childlessness and marital disruption; he concludes that one cannot say for sure whether there is a relationship if one has only cross-sectional data and compares mean marital duration for those with children and without. Some research examines only the age of the youngest child (vs. no children); Mott and Moore (1979) find no evidence of effects of youngest child, but their sample includes only the early years of marriage and is focused on the preschool years. Thornton (1977) examines the effect on marital stability of number of children without regard to their age. He reports that both women with no children and those with relatively large families exhibit higher rates of marital disruption than those with one or two children. In a related piece, he reports that the number of children has no significant effect on attitudes toward divorce in general (Thornton 1985) (but presence of children un-

der age six decreases the proportion of husbands who have ever considered divorce for themselves, according to Huber and Spitze [1980]).

Waite, Haggstrom, and Kanouse (1985) focus only on effects of the firstborn. In an analysis restricted to the early years of parenthood, they find that married parents have disruption rates of 5% and 8% for males and females, respectively, by two years after the birth of the first child. However, they estimate that from 22% to 25% of these couples would have broken up without the birth of a child. This is an estimate based on comparisons with married but childless couples with many of the same characteristics.

Cherlin (1977) examines the effect of having any preschool children and of having any older children, the effect of total number of children, and the effect of premarital childbearing on chances of disruption over a five-year period. He finds that only the presence of any preschool-aged children decreases the probability of divorce for married women, a result also reported by Becker et al. (1977). But Hannan, Tuma, and Groeneveld (1977), analyzing data from the Seattle and Denver Income Maintenance Experiment, find no effect of the presence of children under age six or of children aged 6–10 on marital dissolution for black, white, or Hispanic women, although the investigators do not consider number of children.

In perhaps the most comprehensive examination of the determinants of marital disruption and how these change between cohorts and over the life cycles of the women involved, Morgan and Rindfuss (1985) find that first births decrease the likelihood of divorce in all marital cohorts and at all the marital durations that they examined. Premarital births increased chances of disruption, but these effects were limited to the first few years of marriage. In contrast, Cherlin (1977) finds no effect for premarital births.

If the empirical evidence on the relationship between children and marital disruption is mixed, most theoretical perspectives are clear. We turn to the major perspectives in the next section.

THEORETICAL PERSPECTIVES ON CHILDREN AND DIVORCE

Sociological theories tend to focus on the effect of children on the sexual division of labor within the family, a division that increases ties between the partners on the basis of specialization (Durkheim 1933). According to this perspective, the gains from specialization increase the value of the marriage. Sociological theories also point to the web of obligations—legal, financial, social, and emotional—through which children tie their parents together and to themselves (Morgan et al. 1988) and to the normative and religious constraints on divorce, especially when the couple has

children (Thornton 1977). Children may increase the psychic costs of divorce to the parents, both because of the loss of access to the children experienced by the noncustodial parent (Furstenberg et al. 1983) and the increased burden on the custodial parent and because of the decreased financial well-being that typically follows divorce, especially for the mother and the children (Hoffman 1977; Duncan and Hoffman 1985). Parents may end their marriages less readily than childless couples because they believe that disruption will harm the children (see Thornton [1977] for a review of this literature), and, indeed, the literature on the consequences of divorce shows deleterious short-term and long-term effects (Furstenberg and Allison 1985; McLanahan and Bumpass 1988).

A number of researchers argue that young children stabilize marriages more than older children. Cherlin (1977) argues that preschool children more effectively inhibit marital disruption because they require more time, effort, and expense than do older children. We elaborate this reasoning as follows. If children tie their parents together through increasing specialization within the marriage, this tie might be strongest when that specialization is most complete, that is, during the years of childbearing, infancy, and the preschool ages. Mothers turn over some of the tasks of child rearing of older children, such as discipline, entertainment, helping with homework, and athletic training, to fathers. This is especially true for sons (Morgan et al. 1988). And schools take over some of the child care and training functions for children over five or six. Parents may believe that very young children's dependence on parental time and attention is such that the loss of a parent from the home would be more harmful for them than for a school-aged child or teenager. And recent research suggests that children who receive full-time care by someone other than their mother during the first year suffer emotional and behavioral consequences over the long run (Belsky and Rovine 1988; Desai, Chase-Landale, and Michael 1989). Since marital disruption and the consequent loss of income force many previously homemaking mothers into the labor force, these considerations might deter divorce most forcefully during the child's early years. In addition, having a child may signal commitment to the relationship, a signal that gets weaker the more distant the signaling event.

Older children may inhibit the disruption of their parents' marriage less than younger children if, as children enter school, they need much less of their parents' time in care and become more emotionally independent. And since parents spend less time with older than with younger children, noncustodial parents give up less contact with older children than with younger. Finally, the closer children get to maturity and the residential independence that accompanies it, the less *future* contact with the child a parent gives up by divorcing.

Economic perspectives on divorce (Becker 1973; Becker et al. 1977) focus on investments in the marriage and on the alternatives to the marriage. Unlike many investments in being married, such as specialization by the spouses, children constitute an investment in *this particular marriage* and, as such, should decrease chances of disruption of the marriage in which they were produced. In fact, previously married women, especially young women, are less likely to remarry if they have children than if they are childless (Teachman and Heckert 1985), so that alternatives to the current marriage probably are less attractive for mothers than for childless women. However, economic theories appear to be silent on how children of different ages affect marital stability.

Both sociological and economic perspectives imply that, to the extent that children increase the real or psychic costs of divorce or create a long-lasting bond between the parents, couples that have ever had children will have more stable marriages than childless couples. In addition, young children may decrease the chances of divorce either by raising the parents' commitment to the marriage or by increasing the costs of disruption. Having children may signal at least a short-run commitment to the continuation of the relationship. We test both of the hypotheses implied by this perspective: first, that offspring reduce the probability of dissolution and, second, that younger children have a greater stabilizing effect on marriages than older children.

However, both sociological and economic theories have paid less attention to the destabilizing than to the stabilizing effect children may have on marriages, and neither perspective has fully explicated the conditions under which children stabilize or, conversely, destabilize marriages. Empirical work and scattered theoretical treatments point to the mechanisms through which and the conditions under which children might increase chances of disruption.

First, as most theories note, children born outside the marriage in question may increase chances of divorce because they belong to only one of the partners, by providing ties to relationships outside the marriage, and by acting as a source of conflict within the marriage (Becker et al. 1977; Cherlin 1978). In fact, recent research has found that remarriages that include stepchildren are more likely to dissolve than remarriages without them and that children from previous relationships constitute a source of tension, strain, and discord in new marriages (White and Booth 1985a). This same reasoning extends to children born outside this relationship, before the first marriage. We test the hypothesis that children born out of wedlock increase the chances of marital disruption.

There are a number of other conditions under which children may make marriages less likely to survive. Much previous research shows

strong, zero-order effects of premarital conception on chances of disruption (Furstenberg 1976; Coombs and Zumeta 1970); theory points to the abbreviated search for a marital match often caused by such a pregnancy as a primary mechanism (Becker et al. 1977). In addition, any childbearing soon after marriage gives the new couple relatively little time to establish their relationship before entering their new roles as parents. Childbearing early in the marriage often reduces the couple's ability to accumulate assets prior to the financial drain of supporting a third family member (Coombs et al. 1970; Freedman and Thornton 1979). We test the hypothesis that a first birth conceived before marriage increases marital instability.

But we suggest other mechanisms through which children may increase chances of disruption: children interfere with time spent maintaining the marital relationship and may decrease happiness and life satisfaction. Hill (1988) suggests that children decrease marital stability indirectly because, as she shows, their presence interferes with the parents' leisure time spent together and shared leisure activities create a bond that strengthens marriage. Her research, which is based on the sample of individuals interviewed in the Michigan Time Use Survey in 1975-76, supports this reasoning (see also Kingston and Nock 1987). And a substantial literature suggests couples with children are less satisfied, on average, with their marriages than are childless couples (Glenn and McLanahan 1982) and that women with young children perceive a lower quality of life than those in any other life-cycle stage (Campbell, Converse, and Rogers 1976). Some of this unhappiness appears to result directly from the demands and disruptions of the birth of a child, especially a first child (Rossi 1968).

If the presence of young children inhibits divorce, for reasons outlined above, but decreases marital and life satisfaction, this process may result in increasing heterogeneity of the population of couples at longer marital durations, with still-married childless couples happier and more satisfied than couples with children. If, as we and others have suggested, the stabilizing effect of children declines with the children's ages, then parents may postpone disruption when children are young, creating a pent-up demand for divorce that parents satisfy when children get older. This would appear as a declining negative effect on disruption with children's age, with the inhibiting effect disappearing or even turning positive at older ages. We test the hypothesis that the presence of older children increases marital instability compared with childless couples among those couples still married.

We restrict our attention in this analysis to the stability of first marriages because a sizable number of influences on disruption apply only

to second- or higher-order marriages, making it difficult to combine disruption models for first and later marriages (McCarthy 1978; Teachman 1986).

We do not systematically explore possible differences between racial groups in the effect of children on the stability of the parents' marriage. The differences between blacks and whites in patterns of family formation (Michael and Tuma 1985) and in rates of divorce and separation (Bachrach and Horn 1985) suggest such differences might exist. These racial differences deserve detailed consideration in their own right, but space limitations make that impossible here.

We estimate a model that specifies that couples face an underlying risk or hazard of dissolution and that this hazard depends in part on presence, age, and number of children, all of which change over the course of the marriage. This model also takes into account the effects of marital duration, or length of time a couple has been married, on hazard of disruption.

PSID DATA: MARITAL DURATIONS AND CHILDBEARING PATTERNS

Our analysis uses data on first marriages constructed from the first 18 years, 1968–85, of the PSID. The PSID is well suited to analysis of the relationship between children and marital disruption. First, it contains longitudinal information on both marital and fertility changes. This allows us to trace the experiences of individual couples over a substantial period. Second, the sample of married couples is large, with a sizable number of disruptions during the period of observation. Third, since our analysis uses all information on any sample member ever in the PSID who meets our criteria, we minimize problems of sample attrition. Fourth, the PSID obtained information on marital status at each interview, a practice that minimizes recall bias, together with a complete retrospective marital and fertility history in 1985. The availability of the two types of information allows us to date marriages, separations, divorces, and births with a good deal of precision. Finally, the PSID represents the entire age range of married couples in the United States, which allows us to generalize to the nation as a whole.

The PSID began in 1968 with 5,500 households. Approximately half of those were drawn from a nationally representative sample and half drawn from the prior year's Survey of Economic Opportunity (SEO) sample, which oversampled low-income households. Demographic and socioeconomic data were collected for the household and each member of the household. These included marital status and, for married household heads (the husband in the case of married-couple households and the householder in others), data on whether the current marriage was the first marriage and the date of marriage. Information was collected on all

household members including children. The sample has been resurveyed each year since that time and contains a set of basic data, including marital status and changes in it, family composition, and numerous demographic and behavioral variables as well as data on special survey topics.

The 1985 wave (eighteenth wave) of the PSID represents a substantial improvement over earlier waves for the study of marriage, divorce, and remarriage. This interview included a special Heads' and Wives' Interview, which obtained a detailed marital history and fertility history (and work history) for the head of household (single female head, single male, or husband of couple), for wives (if an intact couple), and for others in the family. The marital history includes the dates of all marriages and divorces and the first separation in each marriage.²

Sample Characteristics

We begin with every couple that we observed married between 1968 (the initial interview in the PSID) and 1985, the year in which the PSID obtained a detailed retrospective marital history. We restrict our analysis to those couples for whom this was the respondent's first marriage. For couples married in 1968, the respondent is the husband. For those who married later, the respondent is the PSID sample member and could be either male or female.

We observe separation or divorce within intervals defined by the interview year. The value of all time-varying measures, such as the husband's income, comes from the immediately preceding interview. In addition, within years we begin a new interval whenever one of the children born to the couple enters a new age category or when a marriage begins or ends. For example, we define a new interval when the couple has a first birth, when a preschool child reaches age six, or when an 18-year-old reaches 19. This allows us to measure the value of these time-varying variables very precisely over the marriage. We include in our sample all intervals during which the marriage is at risk of disruption.

In this analysis we combine divorces and separations under the general rubric of marital disruption or dissolution. We include separations because separation often precedes legal divorce by several years, and because separation without subsequent divorce is a frequent disruption pattern for blacks (Glick and Norton 1977).

The result is a sample of 4,400 first marriages, one-third of which ended in divorce or separation during the panel period. Thirty-one per-

² See Hofferth (1982) for a discussion of uses of the PSID for demographic research on the family. This discussion helped guide the 1985 survey effort.

cent of these marriages were underway at the first interview in 1968 and so are left truncated—we have no information about the marriage before that year. The observations are truncated rather than censored because the marriage date is known, but the marriage had to survive to its current duration in 1968 to be a first marriage. The remainder of the marriages in our sample began during the panel period.

For all marriages observed at any point during the panel period we observe the duration of the marriage (if the couple divorces or separates during the panel) or the censoring of the marriage by attrition, death of one partner, or the last wave of the survey. But we observe 1,070 divorces or separations among those married during the panel and 354 disruptions among marriages underway in 1968 for a total of 1,424 disruptions. Thus, 26% of those couples who were already married in 1968 dissolved their marriages within their participation in the panel, and 35% of those married for the first time within the panel divorced or separated during their participation in the panel. This difference in the percentage of marriages disrupted reflects high divorce rates early in marriage, especially since the average period of participation as a married couple is shorter for those married within the panel. The remaining couples, not divorced within the sample, represent right-censored observations because we do not observe the dissolution of the marriage and know only that, if it occurred, it happened after the last survey period.

We adjust risk of dissolution for the effects of covariates that theory and previous research point to as important determinants of marital instability. These include race (Michael and Tuma 1985), the education of the husband (Glick and Norton 1977), income (Hannan et al. 1977), age at marriage of the husband and of the wife (Moore and Waite 1981), religion (Chi and Houseknecht 1985; McCarthy 1979), and time period (Thornton and Rodgers 1987). South and Spitze (1986) find that the effects of these and similar variables do not change over the marital life course. Table 1 gives definition of these variables and their means for couples observed at various durations of marriage. We measure the income of the head (Cherlin 1978; Ross and Sawhill 1975) as a dummy variable for low income (the bottom quartile). Only the income measure—and measures of ages and numbers of children, discussed next—is time varying. In all cases, we experimented with a number of specifications of these independent variables before settling on those presented here as best capturing the effects in question.

Marital and Premarital Fertility Measures

The variables of primary interest here measure the presence and ages of children during the interval in question. We have created these variables

Children and Marital Disruption

TABLE 1
MEANS OF NON-TIME-VARYING COVARIATES

Variable	Total Percentage
Any premarital births (PREMAR)	13.1
Child born in first 8 months of marriage (BIRTHMAR)	15.7
BLACK	34.2
Age of head when marry < 22 years (AGMRH22)	44.4
Age of wife when marry < 20 years (AGMRW20)	42.1
Education of head < 12 years (EDHLT12)	29.1
Education of head = 12 years	39.7
13 years ≤ education of head ≤ 15 years (EDH1315)	18.5
Education of head ≥ 16 years (EDH16)	12.7
Year married < 1960 (YMAR60)	17.8
1960 ≤ year married ≤ 1970 (YMAR6070)	24.6
1971 ≤ year married ≤ 1976 (YMAR7176)	24.9
Year married ≥ 1977 (YMAR77P)	32.7

NOTE.—*N* = 4,400; mean year married = 1970

to allow us to test the hypotheses presented earlier. For this reason, we distinguish first children from their later-born siblings, and we distinguish younger from older children. One variable indicates that the couple's first child was born in the previous year (FB), another that the couple had a second- or higher-order birth in the last year (BIRTH). We measure the presence of a first child between 1 and 5 years old (FPSC), the number of preschoolers other than the first (NPSC), the number of children between 6 and 12 years old, the number of children between 13 and 18, and the number of children older than 18. In addition, we include a dummy variable for a premarital conception, measured as a birth within eight months of marriage (BIRTHMAR), and a dummy variable for a child born prior to the mother's first marriage (PREMAR). Table 2 presents means for presence and ages of children for couples at various durations of marriage.

The panel nature of the data used in this study is extremely useful for identifying the separate effects of duration and children, given the strong association of presence and ages of children with years married. A cross-sectional view of the data reveals a strong tendency for those couples who have been married for a longer time at the initial survey to have more and older children. We include marriage cohort variables to capture those trends. However, we observe the couples in our sample over many years, and so have a longitudinal view of their childbearing and marital stability.

TABLE 2
DEFINITIONS AND MEANS OF COVARIATES AT VARIOUS MARITAL DURATIONS

Variable	2 Years	5 Years	10 Years	20 Years
Number of children born within marriage (NKID). . . . .	.69	1.36	2.29	3.67
A first birth within marriage (FB)... . . . .	.23	.07	.01	.00
Second or later child (BIRTH) . . . . .	.07	.19	.11	.02
First preschooler (FPSC)..... . . . .	.38	.75	.15	.00
Number of preschoolers (NPSC)..... . . . .	.01	.35	.77	.23
Number ages 6-12 (N612) . . . . .	.00	.00	1.25	1.01
Number of ages 13-18 (N1318)..... . . . .	.00	.00	.00	2.12
Number ages 19+ (NGT18)..... . . . .	.00	.00	.00	.30
Income in bottom quartile of the distribution (Q1MERN). . . . .	.43	.27	.19	.20
Sample size.....	3,706	2,518	1,681	1,199

STATISTICAL MODEL AND ESTIMATES

This section is concerned with our methods and basic results. We begin by presenting our statistical model. We discuss how it is developed to incorporate the major features of the PSID data. Next we present the estimates of parameters and the basic results and discuss some alternative specifications that we considered. Finally, we define the simulation method used in the next section to explore the implications of the estimates.

Statistical Model

The statistical model underlying our approach is based on proportional hazards in continuous time, modified to accommodate the key features of our data: (1) the explanatory variables of primary interest, measures of the presence of children, inherently vary over time; (2) some marriages were in progress at the time of the final survey or at the time that the couple left the sample (due to attrition), so that marriage durations may be right censored; (3) the data on marriage durations come either from retrospective reports of dates of marital separation or divorce or from annual reports of marital status at survey times over the 18-year panel; and (4) some marriages were in progress at the time of the initial survey, so that marriage durations may be left truncated (at a known duration).

Let us begin with the basic continuous-time model of marital duration. A couple marries and is immediately at risk of dissolution. The (log) hazard of marital disruption is given by

$$\ln h(t) = \ln h_0[\nu(t), \alpha_1] + \alpha_2'X(t) + \alpha_3'kids(t),$$

where $v(t)$ is the duration at time t , $X(t)$ is a vector of time-varying (or constant) regressors, and $kids(t)$ is a vector of variables measuring the presence and ages of children.

The risk of dissolution may change systematically over time as the marriage continues. The couple learns over time about the quality of the match, and the couple may acquire "marriage-specific capital," which makes the union more desirable so that the risk of divorce declines as the marriage endures. This change accounts for declining divorce probabilities with marital duration (Becker et al. 1977). These systematic changes in the risk of dissolution are reflected in the baseline hazard. We use a piecewise log linear spline in marriage duration, $v(t)$, for the baseline hazard.

$$\ln h_{\mu}[v(t), \alpha_1] = \alpha_{10} + \sum_{k=1}^K \alpha_{1k} \text{spline}_{\mu}[v(t)],$$

where $\text{spline}_{\mu}[v(t)] = \min\{\max[v(t) - \pi_{k-1}, 0], \pi_k - \pi_{k-1}\}$.³ The probability of the marriage surviving to duration t or longer (at zero values of covariates) is given by the "baseline" survivor function at duration t :

$$S_{\mu}(t) = \exp\left\{-\int_0^t e^{\ln h_{\mu}(\xi, \alpha_1)} d\xi\right\},$$

where $S_{\mu}(0) = 1$.

The measures of the presence of children in the marriage, as well as certain other covariates, vary inherently over time. Therefore, the hazard of divorce changes as the number and ages of children change. The proportional hazard model introduces these changes in the hazard rate through proportional shifts in the hazard rate as a function of the time-varying covariates where X_j is the value of X within the interval t_j to t_{j+1} and includes race, education, an indicator of low income, and premarital births.⁴ Changes in these variables proportionately shift the hazard, that is,

$$h(t) = e^{\ln h_{\mu}[v(t), \alpha_1] + \alpha_2 X(t) + \alpha_3 kids(t)}.$$

The introduction of time-varying covariates, or the use of interval observations with covariates changing only between intervals, causes the survivor function to become a function of the full set of past values of the time-varying covariates X , which we denote χ . The probability that

³ Where the spline end-point nodes are $\pi_0 = 0$ and $\pi_K = \infty$.

⁴ See table 1 above for a more complete list.

a marriage will last at least to duration $v(t)$, conditional on the sequence of covariates up to that time, is

$$\begin{aligned} S(t, \chi) &= \exp \left\{ - \int_0^{v(t)} h(\xi) d\xi \right\} \\ &= \exp \left\{ - \sum_{i=1}^I \int_{v(t_i)}^{v(t_{i+1})} h(\xi) d\xi \right\} \\ &= \prod_{i=1}^I \left[\frac{S_e(t_{i+1})}{S_e(t_i)} \right]^{\exp\{X(t_i) + \alpha_i' h(t_i)\}}, \end{aligned}$$

where t_{I+1} is the duration at the end of the last subinterval I . Implicitly $t_1 = 0$.

Marriages in progress at the time of the final survey or at the time that the couple left the sample (due to attrition) are right censored. The likelihood for a right-censored duration is simply the survivor function evaluated at the duration as of the censoring time, $t = t_c$.

For those marriages in which the dissolution date, v^* , is known, the likelihood of the corresponding marital duration is also dependent on the full history of regressors and is given by

$$H^*(v^*, \chi) = S(v^*, \chi) h(v^*).$$

For those marriages known only to have ended between surveys, the likelihood is given by

$$H^{**}(v^*, \chi) = S(t_{I+1}, \chi) \left[1 - \frac{S(t_{I+1}, \chi)}{S(t_I, \chi)} \right],$$

where t_{I+1} is the duration at the end of the last subinterval I .

About a third of the first marriages were in progress at the time of the first survey. These observations are left truncated. Left truncation occurs in the case in which the marriage date is known but the marriage had been in progress m years when it was first observed.⁵ For these observations the likelihood is conditioned on the probability of the marriage's surviving from its inception to the initial period of observation, that is, the survivor function at that duration. In this proportional hazard formulation this probability simply cancels with the corresponding por-

⁵ Left censoring would be the case where the couple was married at the first interview but had been married for an unknown duration.

tion of the probability of the full duration sequence, so that the sequence begins at duration m . That is,

$$S[v(t), \chi] = \prod_{i=m}^I \left[\frac{S_e(t_{i+1})}{S_e(t_i)} \right]^{-\alpha_1 \chi(t_i) + \alpha_2 \chi(t_{i+1})}$$

Parameter Estimates

Maximum-likelihood estimates of the parameters of the model are presented in table 3. The first column of table 3 presents estimates from our preferred model, which includes all measures of numbers and ages of children discussed earlier. The other columns in table 3 present alternative models estimated for comparison. Column 2 presents the model with a single measure of number of children instead of the detailed measures we prefer, column 3 presents the model with no measures of presence and ages of children, and column 4 presents a model that includes only splines for duration of marriage and a dummy variable for race. The coefficients from the models must be transformed to yield clearer substantive interpretation; however, we discuss the pattern of statistical significance and sign briefly below.

Children clearly have a powerful effect on the risk of marital dissolution—at least under some circumstances. While we explore these issues more fully below, the basic pattern is clear: the presence of young children delays the initiation of separation or divorce until the child is of school age. Young children greatly reduce the hazard of disruption, whereas children over age 12 increase the hazard by a smaller amount but for a longer period. Only the presence of preschool children after the first child and children ages 6–12 have no statistically significant effect on the chances that their parents' marriage will dissolve; each child older than 12 significantly *increases* the risk of disruption. And a child born before the beginning of the first marriage substantially increases chances of disruption.

We control for the effect of a number of demographic variables in addition to the measures of the presence of children. Couples in which the husband is highly educated have a much lower rate of separation and divorce than those with less educated husbands, with chances of disruption falling fairly steadily with increases in husband's schooling. Marriage when the wife is age 20 or younger reduces the chances that the couple will dissolve, although we find this result suspect.⁶ The measures

⁶ Other research (Beckett et al. 1988) shows that couples that separate or divorce are more likely to leave the PSID than are stable couples. We think that the teenage

TABLE 3

MAXIMUM-LIKELIHOOD ESTIMATES OF PARAMETERS IN MODEL OF MARITAL DISRUPTION

Variable	1	2	3	4
Intercept	-3.9303*** (.3226)	-3.8225*** (.3206)	-3.8315*** (.3203)	-3.5820*** (.1637)
0-1 years	1.3443*** (.2151)	1.1846*** (.2137)	1.1797*** (.2135)	.9890*** (.2118)
1-2 years	-.0900 (.1316)	-.0944 (.1299)	-.1029 (.1298)	-.2275* (.1288)
2-5 years	-.0252 (.0409)	-.0254 (.0395)	-.0325 (.0391)	-.1028*** (.0379)
5-10 years	-.0683*** (.0300)	-.0420* (.0247)	-.0492*** (.0246)	-.0833*** (.0225)
> 10 years	-.0873*** (.0201)	-.0450*** (.0147)	-.0451*** (.0146)	-.0698*** (.0094)
BLACK	.3251*** (.0698)	.2195*** (.0598)	.2624*** (.0560)	.5261*** (.0542)
AGMRH22	.0748 (.0617)	.0698 (.0615)	.0481 (.0607)	
AGMRW20	-.1255*** (.0627)	-.1412*** (.0626)	-.1704*** (.0620)	
EDHLT12	.3004*** (.0624)	.3171*** (.0623)	.3305*** (.0621)	
EDH1315	-.1565* (.0804)	-.1631*** (.0798)	-.1682*** (.0796)	
EDH16	-.5621*** (.1147)	-.5826*** (.1139)	-.5940*** (.1135)	
YMAR60	.0455*** (.0214)	.0487*** (.0214)	.0523*** (.0212)	
YMAR6070	.0137 (.0145)	.0091 (.0141)	.0154 (.0138)	
YMAR7176	.0344* (.0181)	.0392*** (.0180)	.0404*** (.0180)	

YMAR7P.....	.0926*** (.0210)	.0947*** (.0209)	.0956*** (.0209)
PREMAR.....	.6998*** (.1437)	2054*** (.0766)	
BLACK*PREMAR.....	-.6531*** (.1674)	-.0333 (.0754)	
BIRTHMAR.....	.0695 (.1024)		
BLACK*BIRTHMAR.....	-.1226 (.1427)		
NKID.....		-.0451* (.0268)	
FB.....	-.8888*** (.1319)		
BIRTH.....	-.4958*** (.1374)		
FPSC.....	-.1678*** (.0763)		
NPSC.....	-.0393 (.0586)		
N612.....	-.0191 (.0515)		
N1318.....	.1442*** (.0619)		
NGT18.....	.1629*** (.0774)		
Q1MERN.....	.4394*** (.0567)	.4425*** (.0566)	.4435*** (.0566)
Log Likelihood.....	-7,738.4	-7,785.6	-7,904.9

NOTE.—Values in parentheses are SEs.

* .10 > P > .05

** .05 > P > .01.

*** P ≤ .01.

of marriage cohort show increases in chances of disruption before 1960, a period of relative stability from 1960 to 1970, and then substantial increases after 1977. This pattern maps secular trends in divorce rates fairly well. We also see that low husband's income (in the year preceding a survey response) increases the risk of disruption. These results closely match those reported by others.

Comparison of the estimates in columns 1–4 of table 3 makes some interesting points. First, the effect of number of children born during the marriage (col. 2) is negative but quite modest in size. This effect reflects the strong negative effects of young children, especially the firstborn, the weak effects of preschool- and school-age children, and the positive effects of children older than 12. The measure of number of children appears to be quite misleading about the effect of children of different ages and birth orders on the chances that their parents' marriage will dissolve. Note also that the effect of a premarital birth is much weaker in the equation estimated in column 2, which includes numbers of children born but none of their characteristics. This suggests some correlation between occurrence of a premarital birth and timing and number of marital births so that, without appropriate controls, some of the protective effect of young children offsets the disruptive effect of a child born before marriage.

Note also that the parameter estimates in column 3 come from models that contain no measures of presence or ages of children and are virtually identical to those in columns 1 and 2 for all the remaining variables in the model. So, although a simple measure of number of children born does not reflect the complex effect of children on chances that a marriage will end, use of such a variable—or even no measures of marital child-bearing—has little effect on conclusions about the strength of other factors.

The final column of table 3 shows a very simple model, which includes only splines for marital duration and a dummy variable for race. Note that when other factors are not controlled, black couples are much more likely to end their marriages than are whites. But controls for education, low income, age at marriage, and so on substantially reduce this differen-

brides who show lower hazards of divorce in our models are a selected subset of those who married young, with more leaving the panel when their marriages break up and thus censored before divorce (an observed divorce). This reasoning is supported by results (not reported here) from models that include a measure of whether the respondent left the survey before the 1985 retrospective marital histories; these models show no significant effect of age of the wife at marriage. We do not include this measure of censoring in the models in table 3 because causality almost certainly runs predominantly from marital disruption to leaving the panel rather than the reverse.

tial, although it remains quite large. However, comparison of the coefficients for the BLACK variable in the three specifications shows that including either detailed or simple measures of children has little effect on the racial differential.

CONSEQUENCES OF CHILDBEARING PATTERNS FOR MARITAL DURATIONS

In this section we present a discussion of specific hypotheses about the effect of children on marital duration. To make the rather cumbersome coefficients in table 3 more easily interpretable, we present simulations of the proportion of marriages surviving and the hazard of disruption at each duration of marriage for a couple with a chosen set of characteristics.

The previous section presented estimates of the effects of children on the hazard of marital disruption, focusing on effects of the first birth, all subsequent births, and presence and numbers of children of various ages. We find that a first birth dramatically lowers the probability that the marriage will dissolve in the interval, with a smaller effect of later births. This finding is consistent with the reasoning that a first birth acts as a signal of the stability of the couple—so that those couples who plan to stay together are much more likely than others to become parents, at least in part because they plan to stay together. This finding is also consistent with Cherlin's (1977) argument that the high costs of caring for a young child increase the costs of dissolving a marriage.

Couples with children ages five or younger face significantly lower risks of disruption than other couples (although the effect is only significant for the first preschooler). But the inhibiting effects of children older than five decrease with the age of the child; we see very small, statistically insignificant effects of children ages 6–12, with the effect of children becoming positive in the teenage years, so that each child age 13 or older significantly increases the chances that his or her parents will dissolve their marriage. These results match quite closely other findings of the effects of preschool children (Becker et al. 1977; Cherlin 1977). However, previous research only vaguely suggests a *positive* effect of children ages 12 and older on the chances that their parents will dissolve their marriage. We address this issue in more detail below.

Next, we assess the implications of the estimates presented earlier of effects of children on the hazard of divorce and for the long-run marital stability of couples with different numbers of children. We do this by simulating hazards of disruption and survival rates for couples with base-line values on the time-invariant independent variables while varying

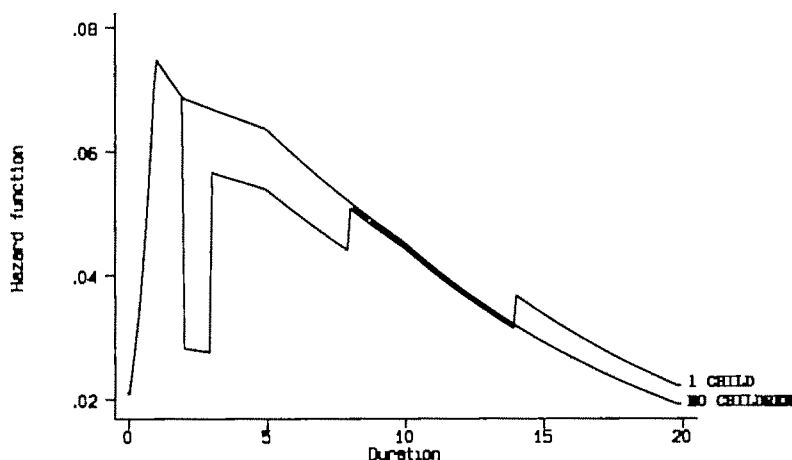


FIG. 1.—Simulated hazard function for couples with no children and one child

the number and timing of children. This exercise displays the effect of different patterns of childbearing on disruption at various marital durations, other things being equal.

We take as the baseline case a couple with the omitted values on all series of dummy variables: couples married in 1970, with a male head of household with 12 years of schooling and an income higher than the lowest quartile, who married at age 22 or older to a woman aged 20 or older, with no premarital birth or birth in the first year of marriage.

Figure 1 displays the effects of any versus no children on hazards of disruption of the marriage. Figure 2 shows survival rates at 20 years of marriage for couples with no children, with one child, with three children, and with five children.

These figures make two important points. First, as figure 1 shows, hazards vary dramatically over the course of the marriage for couples with and without children; those with no children face hazards that rise steeply over the course of the first year and then fall gradually over the remainder of the marriage, whereas parents face dramatically lowered hazards of disruption when their first child is young and somewhat lower hazards until their children become teenagers. But each older child increases the hazard of disruption significantly.

Figure 2 shows the implications of this pattern for the long-term survival of couples with different numbers of children. The results are striking. The early protective effects of children on the marriage are largely offset by the later disruptive effects, making the overall effect of children on marital stability quite modest. This substantive result does not arise

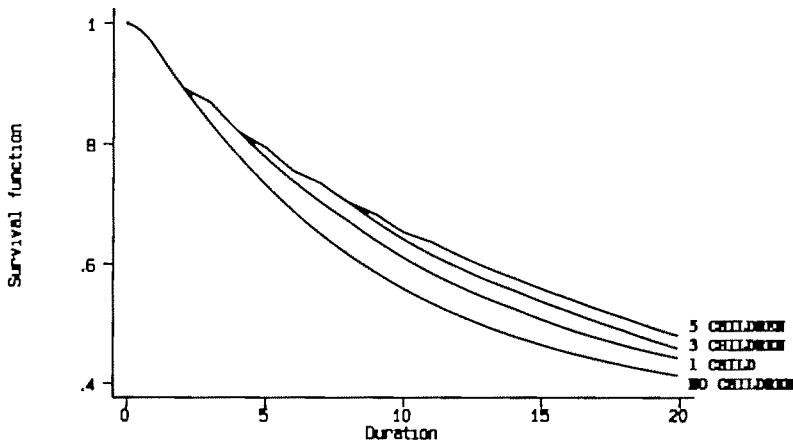


FIG. 2.—Simulated survival function for couples with no children, one child, three children, and five children.

from any constraints on the model but from the empirical results we obtain.

We are now in a position to use our findings to answer some of the questions posed earlier. First, does having children increase marital stability? The answer is clearly, yes and no. Having children increases marital stability in the short run. But in the long run, children have only a modest stabilizing effect. Second, do younger children increase stability more than older children? Clearly they do. In fact, we estimate that older children significantly *decrease* marital stability after about age 12. We find that each additional child reduces the parents' risk of disruption when the child is age five or younger and increases this risk when he or she enters adolescence. The number of children changes the *timing* of disruption but does little to change its long-run probability. Do children born before or shortly after marriage decrease stability? The stability is decreased greatly, but only for premarital births. Children conceived before but born after marriage have no measurable effect on the stability of the marriage.

IMPLICATIONS

Our results provide further evidence on the "effect" of children on marital stability. They help pull together and elucidate scattered findings from earlier studies on the conditions under which children do and do not stabilize marriages. And they provide some support for the theoretical perspective outlined earlier. First, we find little evidence that number of

children, considered by itself, affects the survival of marriages; any effect that exists is modest at best. Second, young children decrease chances of disruption, and this effect is strongest for the first birth. Third, under a number of circumstances children significantly decrease stability of first marriages, for example, if they were born out of wedlock or have reached the age of 13. Both of these effects are substantial.⁷ So our results indicate that, over the long run, marriages with many children are only slightly more likely to survive than marriages with few or even none.

We argued earlier that children could hold couples together by raising the financial or psychic costs of divorce, by increasing the gains from division of labor between the couple (see Morgan et al. 1988), and because of the high costs in time, effort, and money of providing for children, especially when they are young. Whatever the mechanism through which young children decrease the chances that their parents' marriage will dissolve, a substantial literature suggests that parents do not have happier marriages and are not happier with life in general than couples without children (Glenn and McLanahan 1982). White and Booth (1985b) suggest that the desire to have children or the arrival of offspring keeps marriages together even if they are of only moderate quality. Childless couples of the same marital quality divorce more readily, even in the absence of major problems. Thus, the intact childless couples become more and more selected for high marital quality relative to couples with children.

Our results suggest that, although young children hold marriages together, older children do not and may push couples apart. This result could occur if a birth causes couples who would otherwise have divorced to stay together, at least in the short run. Then the sample of couples with older children would include some who would have divorced had they not become parents. If the inhibiting effect of children fades and eventually disappears, these couples would then show higher divorce rates than childless couples simply because some of them had put off divorce earlier.

An alternative argument suggests that children become a source of marital tension as they get older, especially as teenagers, when the strains of parenthood could augment the strains of marriage, leading to increased risks of disruption. And once children reach adulthood and leave home, parents need to give up very little contact with their children if they want to dissolve their marriage. Although our data do not allow us to test these

⁷ Becker et al. (1977) report that the number of children older than 17 had an insignificant positive coefficient on divorce at marital durations from 20 to 25 years. They interpret this to suggest that parents sometimes delay dissolving their marriage until children are older.

or other explanations of the increased risks of marital disruption faced by parents with school-aged and teenaged children, we view this as an interesting and important question for further research.

Our results on the *disruptive* effect of older children on the stability of their parents' marriage, although theoretically understandable and foreshadowed by some previous empirical work, are surprising in their strength and behavioral implications. We look forward to their replication by others.

REFERENCES

- Bachrach, C. A., and M. C. Horn. 1985. "Marriage and First Intercourse, Marital Dissolution and Remarriage, United States, 1982." *Advance Data from Vital and National Center for Health Statistics* 107, Department of Health and Human Services publication no. 85-1250. Washington, D.C.: Public Health Service.
- Becker, Gary S. 1973. "A Theory of the Allocation of Time." *Economic Journal* 81:813-47.
- Becker, Gary S., Elizabeth Landes, and Robert T. Michael. 1977. "An Economic Analysis of Marital Instability." *Journal of Political Economy* 85:1141-87.
- Beckett, Sean, Bill Gould, Lee Lillard, and Finis Welch. 1988. "The Panel Study of Income Dynamics after Fourteen Years: An Evaluation." *Journal of Labor Economics* 6:423-45.
- Belsky, Jay, and Michael J. Rovine. 1988. "Nonmaternal Care in the First Year of Life and the Security of Infant-Parent Attachment." *Child Development* 59 (1): 157-67.
- Campbell, Angus, Philip Converse, and Willard Rodgers. 1976. *The Quality of American Life: Perceptions, Evaluations, and Satisfaction*. New York: Russell Sage.
- Cherlin, Andrew. 1977. "The Effect of Children on Marital Dissolution." *Demography* 14:265-72.
- . 1978. "Remarriage as an Incomplete Institution." *American Journal of Sociology* 84:634-50.
- . 1981. *Marriage, Divorce, and Remarriage*. Cambridge, Mass.: Harvard University Press.
- Chester, Robert. 1974. "Is There a Relationship between Childlessness and Marriage Breakdown?" Pp. 114-26 in *Pronatalism: The Myth of Mom and Apple Pie*, edited by E. Peck and J. Senderowitz. Ithaca, N.Y.: Cornell University Press.
- Chi, S. Kenneth, and Sharon K. Houseknecht. 1985. "Protestant Fundamentalism and Marital Success: A Comparative Approach." *Sociology and Social Research* 69 (3): 351-75.
- Coombs, Lolagene, Ronald Freedman, Judith Friedman, and William Pratt. 1970. "Premarital Pregnancy and Status before and after Marriage." *American Journal of Sociology* 75 (5): 800-820.
- Coombs, Lolagene, and Zena Zumeta. 1970. "Correlates of Marital Dissolution in a Prospective Fertility Study: A Research Note." *Social Problems* 18:92-102.
- Desai, Sonalde, P. Lindsay Chase-Lansdale, and Robert T. Michael. 1989. "Mother or Market? Effects of Maternal Employment on the Intellectual Ability of 4-Year-Old Children." *Demography* 26 (4): 545-61.
- Duncan, Greg J., and Saul D. Hoffman. 1985. "A Reconsideration of the Economic Consequences of Marital Dissolution." 22 (4): 485-97.
- Durkheim, Émile. 1933. *The Division of Labor in Society*. London: Macmillan.
- Freedman, Deborah, and Arland Thornton. 1979. "The Long-term Impact of Preg-

- nancy at Marriage on the Family's Economic Circumstances." *Family Planning Perspectives* 11 (1): 6-21
- Furstenberg, Frank F., Jr. 1976 "Premarital Pregnancy and Marital Instability." *Journal of Social Issues* 32 (1): 67-85.
- Furstenberg, Frank F., Jr., and Paul D. Allison. 1985 "How Marital Disruption Affects Children. Variations by Age and Sex." Paper presented at the annual meeting of the Society for Research in Child Development, Toronto.
- Furstenberg, Frank F., Jr., Christine Winquist Nord, James L. Peterson, and Nicholas Zill. 1983. "The Life Course of Children of Divorce." *American Sociological Review* 48 (5): 656-67.
- Glenn, Norval D., and Sara McLanahan. 1982. "Children and Marital Happiness: A Further Specification of the Relationship." *Journal of Marriage and the Family* 44 (1): 63-72.
- Glick, Paul C., and Arthur J. Norton. 1977 "Frequency, Duration, and Probability of Marriage and Divorce." *Journal of Marriage and the Family* 33:307-17.
- Hannan, Michael T., Nancy Brandon Tuma, and Lyle P. Groeneveld. 1977. "Income and Marital Events: Evidence from an Income-Maintenance Experiment." *American Journal of Sociology* 82 (6): 1186-1211.
- Hill, Martha. 1984. "Marital Stability: The Effects of Spouses' Time Together." Paper presented at the meeting of the Population Association of America, Minneapolis.
- . 1988. "Marital Stability and Spouses' Shared Time." *Journal of Family Issues* 9 (4): 427-51
- Hofferth, Sandra L. 1982. "Uses of the Panel Study of Income Dynamics for the Demographic Study of the Family: Strengths, Weaknesses, and Suggestions for Improvement." Paper prepared for the National Advisory Board on the Panel Study of Income Dynamics.
- Hoffman, Saul. 1977. "Marital Instability and the Economic Status of Women." *Demography* 14 (1): 67-76.
- Huber, Joan, and Glenna D. Spitzze. 1980. "Considering Divorce: An Expansion of Becker's Theory of Marital Instability." *American Journal of Sociology* 86 (1): 75-89.
- Kingston, Paul William, and Steven L. Nock. 1987. "Time Together among Dual-Earner Couples." *American Sociological Review* 52, no. 3 (June): 391-400.
- McCarthy, James. 1978. "A Comparison of the Probability of the Dissolution of First and Second Marriages." *Demography* 15 (3): 345-59.
- . 1979. "Religious Commitment, Affiliation, and Marriage Dissolution." Pp. 179-97 in *The Religious Dimension: New Directions in Quantitative Research*, edited by Robert Wuthnow. New York: Academic Press.
- McLanahan, Sara, and Larry Bumpass. 1988. "Intergenerational Consequences of Family Disruption." *American Journal of Sociology* 94 (1): 130-52.
- Michael, Robert T., and Nancy Brandon Tuma. 1985. "Entry into Marriage and Parenthood by Young Men and Women: The Influence of Family Background." *Demography* 22:515-44.
- Moore, Kristin A., and Linda J. Waite. 1981. "Marital Dissolution, Early Motherhood, and Early Marriage." *Social Forces* 60 (1): 20-40.
- Morgan, S. Philip, Diane N. Lye, and Gretchen A. Condran. 1988. "Sons, Daughters, and the Risk of Marital Disruption." *American Journal of Sociology* 94 (1): 110-29.
- Morgan, S. Philip, and Ronald R. Rindfuss. 1985. "Marital Disruption: Structural and Temporal Dimensions." *American Journal of Sociology* 90 (5): 1055-77.
- Mott, Frank L., and Sylvia F. Moore. 1979. "The Causes of Marital Disruption among Young American Women: An Interdisciplinary Perspective." *Journal of Marriage and the Family* 41 (2): 355-65.

- Ross, Heather L., and Isabel V. Sawhill. 1975. *Time of Transition: The Growth of Families Headed by Women*. Washington, D.C.: Urban Institute.
- Rossi, Alice. 1968. "Transition to Parenthood." *Journal of Marriage and the Family* 30:26-39.
- Schoen, Robert. 1975. "California Divorce Rates by Age at First Marriage and Duration of First Marriage." *Journal of Marriage and the Family* 37 (3): 548-55.
- South, Scott J., and Glenna Spitze. 1986. "Determinants of Divorce over the Marital Life Course." *American Sociological Review* 51 (4): 583-90.
- Teachman, Jay D. 1986. "First and Second Marital Dissolution: A Decomposition Exercise for Whites and Blacks." *Sociological Quarterly* 27 (4): 571-90.
- Teachman, Jay D., and Alex Heckert. 1985. "The Impact of Age and Children on Remarriage." *Journal of Family Issues* 6 (2): 185-203.
- Thornton, Arland. 1977. "Children and Marital Stability." *Journal of Marriage and the Family* 39:531-40.
- . 1985. "Changing Attitudes toward Separation and Divorce: Causes and Consequences." *American Journal of Sociology* 90 (4): 856-72.
- Thornton, Arland, and Willard Rodgers. 1987. "The Influence of Individual and Historical Time on Marital Dissolution." *Demography* 24 (1): 1-22.
- Waite, Linda J., Gus W. Haggstrom, and David E. Kanouse. 1985. "Changes in the Employment Activities of New Parents." *American Sociological Review* 50:263-72.
- White, Lynn K., and Alan Booth. 1985a. "The Quality and Stability of Remarriages: The Role of Stepchildren." *American Sociological Review* 50:689-98.
- . 1985b. "The Transition to Parenthood and Marital Quality." *Journal of Family Issues* 6 (4): 435-49.

Intergenerational Class Mobility in Postwar Japan¹

Hiroshi Ishida
Columbia University

John H. Goldthorpe
Nuffield College, Oxford

Robert Erikson
Swedish Institute for Social Research, Stockholm

This article uses mobility data from Japan to (1) test the Featherman-Jones-Hauser hypothesis that industrial societies share similar rates of intergenerational mobility and to (2) shed light on the debate about Japanese "exceptionalism." Japanese relative mobility rates show no systematically greater deviation from the postulated common pattern than do those of nine European nations. Regarding absolute mobility rates, however, an argument can be made for the distinctiveness of mobility patterns and processes of class formation and reproduction in Japan.

INTRODUCTION

Erikson and Goldthorpe (1987a, 1987b) have sought to evaluate the hypothesis advanced by Featherman, Jones, and Hauser (1975) on similarities in rates of intergenerational social mobility in industrial nations. The "FJH hypothesis" is presented as a reformulation of one put forward by Lipset and Zetterberg (1959) and may be expressed in two propositions.

i) Contrary to what was suggested by Lipset and Zetterberg, industrial

¹ An earlier version of this paper was presented at the meeting of the Research Committee on Social Stratification, International Sociological Association, Berkeley, California, August 1987. This research was, in part, supported by grants of the Stiftung Volkswagenwerk, Hannover, to the CASMIN project. For helpful comments on earlier versions of this paper, we are indebted to Ronald Dore, Takeshi Inagami, Harold Kerbo, Walter Korpi, Carl le Grand, Yoshiaki Nishida, Sawako Shirahase, Ken'ichi Tominaga, Wout Ultee, participants in the seminar at the Nissan Institute of Japanese Studies, University of Oxford, England, and anonymous *AJS* referees. Requests for reprints should be sent to Hiroshi Ishida, Department of Sociology, Columbia University, New York, New York 10027.

nations do differ appreciably in the amount and pattern of their intergenerational social mobility if this mobility is considered (as it was by these authors) at the "phenotypical" level of *absolute rates*—that is, of inflow, outflow, or total rates calculated in percentage terms from the standard mobility table.

ii) A basic cross-national similarity *can*, however, be detected if intergenerational mobility is considered rather at the "genotypical" level of *relative rates*, as expressed by odds ratios implicit in the mobility table, which show the pattern of association between "origins" and "destinations" or, alternatively, the relative chances of individuals of differing origins subsequently being found at different destinations.²

The main argument that underlies the FJH hypothesis could be stated as follows. Absolute mobility rates are influenced—via the marginal distributions of the mobility table—by social structural changes, and indeed by a range of other factors, which can be regarded as exogenously determined so far as particular individuals and families are concerned. Thus, since such factors will tend to be cross-nationally highly variable in their effects—in consequence, for example, of major differences in national economic and political histories—a corresponding degree of variation is likely to be observed in absolute rates. In contrast, relative rates are assessed net of all such exogenous effects and are influenced only by those factors operating within a society to create differences in mobility chances as between individuals of differing origin. If, then, it is the case, as FJH would believe, that industrial societies show a basic similarity in their patterns of socioeconomic inequality—as indicated, for example, in the ordering of occupational hierarchies and in the distribution of income and other resources within them—this similarity should in turn be reflected in relative rates or, as FJH express it, in "endogenous mobility regimes."

To operationalize the distinction between absolute and relative rates on which their hypothesis depends, FJH treat a set of cross-nationally comparable mobility tables as constituting a single three-way contingency table of origin (*O*) with *I* categories, destination (*D*) with *J* categories (*J* = *I*), and nation (*N*) with *K* categories. They then represent their hypothesis of similarity in relative rates by the multiplicative model:

$$F_{ijk} = \eta \tau_i^O \tau_j^D \tau_k^N \tau_{ij}^{OD} \tau_{ik}^{ON} \tau_{jk}^{DN}, \quad (1)$$

where F_{ijk} is the expected frequency in cell *ijk* of the table and, on the right-hand side of the equation, η is a scale factor; τ_i^O , τ_j^D , and τ_k^N repre-

² This formulation of the FJH hypothesis departs in certain respects from the terminology of the original, but not so as to affect its substantive meaning (see Grusky and Hauser 1984).

sent the "main" effects of origin, destination, and nation. The following two-way terms (τ_{ij}^{OD} , τ_{ik}^{ON} , τ_{jk}^{DN}) represent the association between origin and destination, origin and nation, and destination and nation, respectively. The fact that the model does not contain the one possible three-way term, τ_{ijk}^{ODN} , implies that OD will not vary with N ; or, in other words, that, under the model, the odds ratios defining the OD association will be identical from one nation to another.

However, the FJH hypothesis may not be most usefully construed in the strict sense represented by the model of equation (1)—which, not surprisingly, perhaps, has rarely given an entirely satisfactory fit to empirical data. The model does not in fact correspond to the hypothesis in its verbal formulation, in which only a "basic" similarity in relative rates is claimed (Featherman, Jones, and Hauser 1975, p. 340) and not the complete similarity that the model entails. One can, we believe, construe the hypothesis in a weaker, yet still meaningful sense as claiming that across industrial societies there prevails a common or "core" pattern of relative rates—or, as we would wish to say—of social fluidity, so that even where cross-national differences do appear, they are still better understood as variations on this common theme rather than, say, as constituting a set of distinctive types of fluidity.

Working within the conceptual context of a class structure, Erikson and Goldthorpe (1987a, 1987b) have developed a model of such "core" fluidity and have applied this model to data on intergenerational mobility—of a high standard of comparability—for seven Western and two Eastern European societies. The results thus obtained provide a measure of support for the FJH hypothesis, interpreted in the way we have suggested, in the following respects. (i) While statistically significant national deviations from core fluidity, as modeled, do in most cases show up, these deviations tend to be small relative to the extent of the cross-national commonality in fluidity patterns that is revealed.³ (ii) The effects identified in the model as inhibiting or favoring intergenerational class mobility would appear to be cross-nationally present in creating this commonality, even if operating from one nation to another with differing force. (iii) The national deviations displayed are often not ones open to explanation in terms of macrosociological variables, by reference to which a systematic typology of national fluidity patterns might in turn be constructed. The source of deviations from core fluidity that would appear to create

³ Thus, e.g., when this model is applied in such a way as to require that all odds ratios implicit in our nine national mobility tables will be virtually identical—i.e., apart from very minor variations resulting from compositional effects—the proportion of the total origin-destination association accounted for ranges across the nations from 82.3% to 98.8%, and the proportion of all cases misclassified from 2.3% to 7.4% (Erikson and Goldthorpe 1987b, table 2).

greater difficulty for the FJH hypothesis is that of political intervention in the processes, or the outcomes of the processes, through which class inequalities in mobility chances are produced and intergenerationally sustained. But such intervention is itself highly variable, both in its objectives and in the degree of success that it achieves.⁴

In this article, we have two, complementary aims. We seek, first, to extend these earlier analyses to the case of Japan and, in this way, to subject the FJH hypothesis to a further and, arguably, more demanding examination. Second, we wish to take the results we obtain as a basis for contributing to the now widely joined debate on the question of the "exceptionalism" or "peculiarity" of Japanese industrial society (for recent contributions, see Mouer and Sugimoto [1986]; and Dale [1986]).

As the first nation outside the European cultural sphere to have reached the stage of "mature" industrialism, Japan represents an opportunity to test all claims regarding "generic properties" of industrial societies. And indeed such a test would seem all the more requisite in that two different arguments are extant that, while in large part opposed to each other, both lead to the conclusion that the FJH hypothesis will in fact have greater difficulty in accommodating the Japanese than the European experience.

One of these two positions is well represented in the work of Nakane (1970). The general interpretation of contemporary Japanese society that Nakane offers is clearly intended as a critical alternative to that provided by Western, especially American, exponents of theories of modernization and of "convergent" industrialism. Nakane argues that many of the basic forms of traditional Japanese social structure have persisted in the course of industrialization and, indeed, have found new expression within an industrial context. Thus, she claims, in Japan the prevailing modes of group formation and group relations have always produced a society in which the dominant structural feature is "not that of horizontal stratification by class or caste but of vertical stratification by institution or group of institutions" (Nakane 1970, p. 87). In preindustrial Japan, the key institutions were those of the household (*ie*) and community; but at the present time the business enterprises, with their distinctive systems of "lifetime employment" and "company welfare," have taken the leading role in creating social identities and affiliations. "In Japanese society it is really not a matter of workers struggling against capitalists or managers but of Company A ranged against Company B. The protagonists do not stand in vertical relationship to each other but instead rub elbows from parallel positions" (Nakane 1970, p. 87).

⁴ This conclusion was most strongly suggested by analyses of mobility in two Eastern European nations, Hungary and Poland.

It seems to follow that Western concepts of social stratification and hypotheses deriving from them are unlikely to be applied with much success to the Japanese case. As Nakane herself puts it: "Even if social classes like those in Europe can be detected in Japan, and even if something vaguely resembling those classes that are illustrated in the textbooks of western sociology can also be found in Japan, *the point is that in actual society this stratification is unlikely to function and that it does not really reflect the social structure*" (1970, p. 87; our emphasis).⁵

The second position that we should note finds strong expression in the work of another leading Japanese social scientist, Ken'ichi Tominaga. In a number of publications (but see esp., 1982) Tominaga has criticized the idea of Japanese "peculiarity" and has explicitly defended the relevance to Japan of Western theories of industrialism. In Tominaga's view, those who, like Nakane, would see Japanese society as sui generis quite fail to appreciate the radical nature of the sociocultural changes that industrialization has produced, and their claims that traditional institutional forms are reestablished within the new industrial order are largely misconceived. Thus, Tominaga points out that the "lifetime employment" system, to which so much attention has been given, is not in fact "traditional" (it became common only after the First World War), is found only in certain types of Japanese companies, and must in any event be seen as differing only in degree and not in kind from employment practices that are quite widespread in many Western societies. Changes in Japanese social stratification have in fact very closely followed the course that theories of industrial society would predict. Through industrialization and accompanying social reforms, the traditional status order of Japanese society has been progressively undermined, and in its place there has developed a far less extreme and more "open" form of stratification, based not on the ascribed attributes of family, kinship, or place of origin but rather on the achieved attributes of education, occupation, and income (Tominaga 1988). Indeed, Tominaga is prepared to suggest that, despite its very different history, Japan can today be regarded as having joined the United States as preeminently a "land of equality" (1982).⁶

What, then, is significant for our present purposes is that, through the

⁵ Views such as those of Nakane are usually associated with the indigenous genre of *nihonjinron*—an extensive literature treating questions of Japanese identity and uniqueness—but it should be noted that they have been echoed by some Western students of Japan. See, e.g., Vogel (1967, p. 108): "The basic cleavages in Japanese society have not been between different social classes but between one corporate group (composed of people at different positions) and other corporate groups."

⁶ Defenses of Western theories of industrial society and "modernization" as applied to the Japanese case have of course also been provided by Western authors. For an early example, see Bennett (1967).

presentation of Japan as a society that in this way exemplifies the "logic of industrialism" in action, Tominaga's position (1979b, p. 83) also constitutes a challenge to the FJH hypothesis. For, while this hypothesis might allow for some initial developmental effect on social fluidity—in the period, say, of "take-off" into industrialism—it does not envisage, and indeed must preclude, any systematic relationship between fluidity and the further development of industrial societies (see Grusky and Hauser 1984, p. 20). Thus, if Tominaga's arguments are valid, not only might one expect Japan, as a "land of equality," to show fluidity consistently above the "core" level but, in any event, the essential features of its mobility regime would seem unlikely, because of their rather rapid evolution, to be adequately represented by any fixed model. In sum, one could say that from Nakane's (1970) position the Japanese case threatens to expose the FJH hypothesis as being too universalistic—too neglectful of cultural diversity that industrialism does not necessarily preclude; but from Tominaga's position, the critical potential of the Japanese case is to show the hypothesis as being too static—too neglectful of the developmental tendencies that are inherent in industrialism.

Finally, on one point at least Tominaga appears to agree with Nakane: that is, in doubting the appropriateness of the concept of class to the analysis of Japanese society. Tominaga does not, like Nakane, mistrust universal concepts as such, but questions whether "class" is such a concept (see, esp., Tominaga, Naoi, and Imada, n.d., pp. 1–5). The origins of class distinctions lie, it is argued, in distinctive features of the history of European societies, and when the concept is applied to these societies it can then map out "real" social groupings; but Japan—like the United States, though for different reasons—has a history in which the idea of class did not spontaneously emerge, and thus its application to the present-day society must involve a degree of artificiality. If Japanese stratification is to be compared with that of other societies, a more "nominalist" conceptual approach is to be preferred—as, for example, that provided by mainstream American sociology in which stratification is envisaged as a hierarchy or continuum of "socioeconomic" status groupings.⁷

DATA

An important innovation in the study of comparative social mobility over the last decade has been the practice of basing comparisons not simply

⁷ Tominaga's doubts over the appropriateness of the concept of class to Japanese society would seem to be in some part influenced by, and directed against, the analyses of class structure that have been offered by Japanese Marxists. (For an account in English, much influenced by these analyses, see Steven [1983].) However, we would note that class analysis is not to be regarded as the preserve solely of Marxists.

on the results of national mobility inquiries as published, but rather on the secondary analysis of the original data sets of these inquiries, following the recoding of items of interest to standardized categories. In this way a substantial improvement in the quality of comparative data can be achieved (Goldthorpe 1985b). Under the auspices of the CASMIN (Comparative Analysis of Social Mobility in Industrial Nations) project, located at the University of Mannheim, a major recoding exercise has been undertaken of mobility data collected in a number of industrial societies during the early and mid-1970s (for further details, see Erikson and Goldthorpe [1987a]), and Japanese material has recently been incorporated into the data base.⁸

The Japanese data source is the 1975 Social Stratification and Mobility National Survey (1975 SSM). This survey, designed by a consortium of Japanese social scientists, took as its population all males aged 20–69 resident in Japan in 1975. The achieved sample size was 2,724, representing a response rate of 68.1% (for further details of the inquiry, see Ando [1978]; Suzuki 1978).⁹ For our comparative purposes we have restricted the sample to one of economically active men 20–64 years old, and we have recoded mobility data for these respondents to the categories of the class schema shown in table 1, which, in its sevenfold version, serves as the main basis for analyses within the CASMIN project.

When the present (i.e., 1975) occupational and employment status distributions of respondents to the 1975 SSM were set against nominally comparable distributions from the 1975 Japanese population census, certain discrepancies emerged. Farmers and managers appeared somewhat overrepresented at the expense mainly of manual workers in industry; and employers and self-employed men were clearly overrepresented at the expense of employees. The most likely source of this latter discrepancy was thought to be that employers and the self-employed had higher response rates than employees since the former could be more readily found "at home" by interviewers.¹⁰ We decided therefore to apply a weighting factor to the sample *ex post*, which was designed to bring the employment status distribution of respondents into line with census data.

⁸ Copies of the CASMIN International Mobility Superfile, in which the data used in this article are contained, can be obtained on application to Professor Walter Müller, Institut für Sozialwissenschaften, Universität Mannheim, Tattersallstrasse 2, D-6800 Mannheim 1, Federal Republic of Germany.

⁹ For access to the data tape resulting from the survey and for guidance on its use, we are greatly indebted to Professor Ken'ichi Tominaga of the University of Tokyo and to the 1975 SSM Committee. We alone, however, are responsible for decisions taken in the course of our reanalysis of the data.

¹⁰ For further discussion of the response rate for the 1975 SSM, see Tominaga (1979a, p. 27) and Ando (1978, p. 26).

This adjustment also had the effect of reducing the discrepancy in the occupational distribution, but no weighting specifically by occupation was undertaken.¹¹ In table 2 we show how, in terms of our class schema, the weighted Japanese sample is distributed by present class, or what we shall refer to as "class of destination," and also by "class of origin," which we index by the class of the respondent's father at respondent's age 15. An indication is also given of how these Japanese distributions compare with those for the nine European nations that have been analyzed by Erikson and Goldthorpe (1987a): England and Wales, France, the Federal Republic of Germany (FRG), Hungary, Northern Ireland, Poland, the Republic of Ireland, Scotland, and Sweden.¹²

CORE FLUIDITY AND THE JAPANESE CASE

The model of core fluidity that has previously been developed by Erikson and Goldthorpe (1987a, 1987b) as a basis for testing the FJH hypothesis is one of a "topological" kind (Hout 1983). That is to say, it aims at elucidating the pattern of social fluidity underlying a mobility table by allocating the internal cells of the table to a limited number of subsets and by then giving to all cells placed in the same subset, or at the same "level," a common interaction parameter—indicating the same level of

¹¹ After sample restriction and weighting, we obtained the usable sample size of 2,064.

¹² One problem encountered in coding the Japanese data to the categories of the class schema should be mentioned, even though it is numerically rather minor. This concerns the employment status of "family worker," which was accorded to 103 of our respondents and to 28 fathers. We have in fact followed the usual practice of the CASMIN project in placing such workers (where they are distinguished) together with "other" employees. In the case of Western nations, this may be justified on the grounds that family workers are typically in receipt of a wage or salary of some kind, even though they may also benefit, directly or indirectly (e.g., through payments in kind), from the proceeds of the family enterprise. However, we would believe that in the Japanese case the category of family worker includes, in addition to such family employees, some further number of persons who do *not* have claims to a regular wage or salary but whose income derives *either* from some share in profits (and who in Western surveys would probably have been treated as "partners"—i.e., as having employer or self-employed status) *or* is in the form of largely casual or ad hoc disbursements made by the family head. In particular, it would appear that until quite recent times—probably around the early 1960s—family workers on Japanese farms, even adults and married sons, could expect only such "pocket money" payment (see Fukutake 1967, chap. 4). Thus, the allocation of all Japanese family workers alike to "employee" classes of the schema (in fact to classes III, V + VI, VIIa, and VIIb) must be reckoned to involve a degree of distortion. Some—though we cannot identify which—would certainly have been more appropriately allocated to classes IVa + b or IVc; while we must acknowledge that such others who are neither partners in the family enterprise nor yet its paid employees do not readily fall into any of the classes of the schema.

TABLE 1
THE CLASS SCHEMA

	Full Text	Seven-Class Mode	Collapsed Version, Five-Class Mode
I	Higher-grade professionals, administrators, and officials; managers in large industrial establishments; large proprietors	I + II Service class: professionals, administrators, and managers; higher-grade technicians; supervisors of nonmanual workers	I-III White-collar workers
II	Lower-grade professionals, administrators, and officials; higher-grade technicians; managers in small industrial establishments; supervisors of nonmanual employees		
IIIa	Routine nonmanual employees, higher-grade (administration and commerce)	III Routine nonmanual workers: routine nonmanual employees in administration and commerce; sales personnel; other rank-and-file service workers	
IIIb	Routine nonmanual employees, lower-grade (sales and services)		

IVa	Small proprietors, artisans, and so on, with employees	IVa + b	Petty bourgeoisie: small proprietors and artisans and so on with and without employees	IVa + b	Petty bourgeoisie
IVb	Small proprietors, artisans, and so on, without employees				
IVc	Farmers and smallholders; other self-employed workers in primary production	IVc	Farmers: farmers and smallholders and other self-employed workers in primary production	IVc + VIIIb	Farm workers
V	Lower-grade technicians, supervisors of manual workers	V + VI	Skilled workers: lower-grade technicians; supervisors of manual workers; skilled manual workers	V + VI	Skilled workers
VI	Skilled manual workers				
VIIa	Semiskilled and unskilled manual workers (not in agriculture)	VIIa	Non skilled workers: semiskilled and unskilled manual workers (not in primary production)	VIIa	Non skilled workers
VIIb	Agricultural and other workers in primary production	VIIb	Agricultural laborers: agricultural and other workers in primary production	see IVc + VIIb above	

NOTE.—As indicated in the text, the seven-class version of the scheme is the one most frequently used in our analyses. We give the name—"service class," etc.—by which we will usually refer to each class.

TABLE 2

DISTRIBUTIONS OF RESPONDENTS TO JAPANESE INQUIRY (Men Aged 20-64) BY CLASS OF ORIGIN AND CLASS OF DESTINATION, AND RANGES FOR NINE EUROPEAN NATIONS (% by Column)

CLASS	ORIGINS		DESTINATIONS	
	Japan	European Range	Japan	European Range
I+II	14	6-14	24	14-28
III	6	2-9	16	2-10
IVa+b	24	3-14	13	2-10
IVc	41	5-53	10	1-25
V+VI	6	14-39	20	20-37
VIIa	6	12-26	14	18-30
VIIb	3	3-22	3	1-14

net association between the categories of origin and destination that are involved. Their model is, however, innovatory in that it is constructed not from a single, multilevel matrix but rather from a number of matrices, each of which aims at capturing a specific effect, or level of effect, operating on the pattern of fluidity as this is shaped within a class structural context. A full account of the rationale of the model is developed by Erikson and Goldthorpe (1987a). Here we give only a brief description of the effects that the model contains. These are:

- i) hierarchy (HI1, HI2)—effects on mobility resulting from differences between classes in the relative advantages they offer as classes of origin and their relative desirability as classes of destination (in this respect, a threefold hierarchical division of the class schema is introduced, as indicated in fig. 1 below);
- ii) inheritance (IN1, IN2, IN3)—effects that increase the likelihood of individuals being found in the same class as that in which they originated;
- iii) sector (SE)—an effect resulting from barriers to mobility between agricultural and nonagricultural classes; and
- iv) affinity (AF1, AF2)—effects on mobility that derive from particular discontinuities (negative affinities) or linkages (positive affinities) between classes and that operate additionally to the more generalized effects of hierarchy and sector.

Formally, the model may be written as

$$F_{ij} = \tau_i^O \tau_j^D \tau_{a(i,j)}^{HI1} \tau_{b(i,j)}^{HI2} \tau_{c(i,j)}^{IN1} \tau_{d(i,j)}^{IN2} \tau_{e(i,j)}^{IN3} \tau_{f(i,j)}^{SE} \tau_{g(i,j)}^{AF1} \tau_{h(i,j)}^{AF2}, \quad (2)$$

	I+II	III	IVa+b	IVc	V+VI	VIIa	VIIb
I+II	HI1+ IN2	HI1+ AF2	HI1+ AF2	HI1+ SE	HI1	HI1+ HI2	HI1+ HI2+ SE+ AF1
III	HI1+ AF2	IN1	...	SE	...	HI1	HI1+ SE
IVa+b	HI1+ AF2	...	IN1+ IN2	SE+ AF2	...	HI1	HI1+ SE
IVc	HI1+ HI2+ SE	HI1+ SE	HI1+ SE+ AF2	HI1+ IN1+ IN2+ IN3	HI1+ SE	SE+ AF2	...
V+VI	HI1	...	...	SE	IN1	HI1+ AF2	HI1+ SE
VIIa	HI1+ HI2	HI1	HI1	HI1+ SE	HI1+ AF2	IN1	SE
VIIb	HI1+ HI2+ SE+ AF1	HI1+ SE	HI1+ SE	HI1	HI1+ SE	SE+ AF2	IN1

FIG. 1.—Postulated effects of hierarchy (HI), inheritance (IN), sector (SE), and affinity (AF) in the cells of the 7×7 intergenerational class mobility table. Note that class IVc (farmers) is treated as being in the lowest level of the hierarchy as a class of origin but in the middle level as a class of destination. This is done in an attempt to take account of the significant increase in the average size of farms that has occurred in all the countries we consider over the period (see, further, Erikson and Goldthorpe [1987a]). Hierarchical divisions are shown horizontally and sectoral divisions are shown vertically.

where F_{ij} is the expected frequency in cell ij of the mobility table, η is a scale factor, τ_i^O and τ_j^D are the main effects of class of origin and of destination, and the remaining eight terms refer to the two levels of hierarchy effects, the three levels of inheritance effects, a sector effect, and negative and positive affinity effects.

In order to make more apparent the substantive content of the model, we show first in figure 1 how the effects of hierarchy, inheritance, sector, and affinity are seen as operating over the individual cells of the 7×7 intergenerational mobility table based on our class schema. (The eight separate levels matrices relating to these effects are given in the Appendix.) Then, in figure 2, we report parameter estimates, in log-additive form, for each of the effects specified. The method by which these estimates were arrived at is discussed by Erikson and Goldthorpe (1987a). We further show in figure 2 the interaction parameters that result in each cell of the table when all effects that apply to that cell are summed. The arrow shape drawn in the figure serves to demarcate cells showing positive and negative parameter values and thus helps bring out the main

Parameter	Effect							
	HI1	HI2	IN1	IN2	IN3	SE	AF1	AF2
	-.22	-.42	.43	.81	.96	-1.03	-.77	.46
	I+II	III	IVa+b	IVc	V+VI	VIIa	VIIb	
I+II	1.24	.24	.24	-1.25	-.22	-.64	-2.44	
III	.24	.43	0	-1.03	0	-.22	-1.25	
IVa+b	.24	0	1.24	-.57	0	-.22	-1.25	
IVc	-1.67	-1.25	-.79	1.98	-1.25	-.57	0	
V+VI	-.22	0	0	-1.03	.43	.24	-1.25	
VIIa	-.64	-.22	-.22	-1.25	.24	.43	-1.03	
VIIb	-2.44	-1.25	-1.25	-.22	-1.25	-.57	.43	

FIG. 2.—Parameters in log-additive form for effects in the model of core social fluidity, and resulting interaction parameters in the cells of the 7×7 intergenerational class mobility table.

features of core fluidity: (i) a generally high—though variable—propensity for intergenerational class immobility (positive values in all cells on the main diagonal); (ii) two areas of high fluidity (positive values in off-diagonal cells) that involve white-collar and blue-collar classes, respectively; (iii) otherwise, a prevalence of either “neutral” or low fluidity, with particularly marked inequalities in mobility chances (high negative values in off-diagonal cells) being most often associated—as can be seen by reference back to figure 1—with sector effects, that is, barriers to mobility between agricultural and nonagricultural classes.

In the case of nine European nations, Erikson and Goldthorpe (1987b) fitted the model of core fluidity to intergenerational class mobility tables in three ways of varying strictness: first, with fixed, cross-nationally common, parameters—as given in figure 2; second, with parameters estimated separately for each nation; and third, in variant form—that is, with modifications being allowed to the effects originally specified in order to achieve a fit of an acceptable degree of closeness. In table 3 we show the results of proceeding likewise with our Japanese table, and we also indicate how these results compare with those for European nations.

When, to begin with, our model is applied with fixed parameters, the indications are (table 3, rows 1 and 2) that the fit achieved to the Japanese data is indeed less good than to the European. As can be seen, the standardized G^2 and Δ (the proportion of all cases that the model misclassifies) values returned for Japan are higher than those for any European

TABLE 3
COMPARISON OF FIT OF THE CORE MODEL TO THE JAPANESE MOBILITY TABLE AND TO
TABLES FOR NINE EUROPEAN NATIONS

	G^2	df	$G^2(S,2,000)^*$	Δ	% Reduction in G^2 from Independence Model
Core model, cross-nationally common parameters.					
Japan.....	124.9	36†	122.2	7.8	75.3
European range.....	58.2-1,229.5	36	43.6-110.3	2.3-7.4	82.3-98.8
Core model, parameters estimated separately for each nation.					
Japan.....	52.6	28	51.9	5.2	89.6
European range.....	33.0-379.0	28	32.8-66.1	1.7-5.8	91.7-99.0
National variants of core model:					
Japan.....	38.4	30‡	38.2	4.4	92.4
European range.....	33.7-186.2	28-29	33.5-42.7	1.7-4.6	92.4-99.0

* $G^2(S) = [(G^2 - df) / N] \times K + df$, where K is a constant sample size. This is a method of standardizing G^2 's calculated for samples with different N 's, which has been proposed by Joseph E. Schwartz as an improvement on the usual G^2/N . Thus $G^2(S,2,000)$ is here an estimate of what value G^2 would have taken if the sample size had been 2,000 in each national sample—which is the approximate size of the smallest in the CASMIN study.

† Since the interaction parameters of the model are in this case given—i.e., not estimated from the Japanese data—the df are the same as for the independence model.

‡ $df = 30$ since it is possible to drop two terms from the Japanese variant model (see text).

nation, and the percentage reduction in the G^2 from the independence model is lower; that is, the core model accounts for a smaller part of the total origin-destination association within the mobility table. However, when our model is applied with its parameters being allowed to vary (table 3, rows 3 and 4), a rather different picture emerges. In this case, while the fit to the Japanese table is still not acceptable, the deviations from the model are of much the same order of magnitude as those we have encountered in our analyses of European data. Both the $G^2(S)$ and Δ values for Japan now fall within the European range, and the percentage of the origin-destination association accounted for lies only just outside it. On the basis of the findings presented in the first four rows of table 3, it could be suggested that the "contours" of social fluidity within the Japanese class structure, although apparently displaying some unusual "highs" and "lows," do nonetheless still follow broadly the same lines as those that seem to be characteristic of European societies.¹³

¹³ We do not, however, report parameter estimates here in view of the fact that the model still does not fit adequately.

We can further explore this possibility by considering how the model of core fluidity could most effectively be adapted in order to fit the Japanese data more closely. In working with European mobility tables, a $G^2(S)$ of around 40 or below was regarded as an acceptable fit since, with 28 df allowed by the model (with parameters estimated separately for each nation), this would imply a P -value of .05 or greater. Of course, once changes to the model are allowed, there will be little difficulty in producing, ad hoc, a version to fit any national mobility table. Thus, in order to preserve interpretability in our results, we sought to restrict modifications to a minimum and, further, to make ones that were not prompted by the inspection of residuals alone but for which we could also claim some substantive grounds.

Following this approach, we were able to devise a variant of the core model adequate to the Japanese data that required changes in only three cells of the mobility table—in each of which, it may be added, numbers were quite small. (i) The IN2 and IN3 terms were included in the cell indicating immobility in the class of agricultural workers, class VIIb; (ii) the AF1 (negative affinity) term was included in the two cells indicating mobility from origins in the service class, I+II (on the concept of the service class, see Goldthorpe [1982]), to either the skilled or nonskilled divisions of the working class, V+VI and VIIa.

The first modification of the model would seem required in consequence of the highly familial character of Japanese agriculture (see Fukutake 1967; Dore 1978). In Japan the majority of farm workers are in fact members of the farmer's family, and sons would appear to be accorded the status of "family worker" while their fathers are alive or at least still active. Thus, it turns out that 70% of men found in the VIIb-VIIb cell of the Japanese mobility table had fathers who were still family workers, even at the time of the respondent's adolescence, and were themselves family workers, presumably waiting to inherit in turn. In other words, we need to adapt our model here to the fact that in the Japanese case most men who appear as immobile farm workers are not true members of an agricultural proletariat but rather are in the—protracted—process of succeeding their fathers as farmers.¹⁴

¹⁴ In the English mobility table, in comparison, only two men out of 56 in the VIIb-VIIb cell were themselves coded as family workers *and* also as reporting their fathers as being such (at respondent's age 15). In fact 80% of *all* Japanese respondents who were classified as farm workers, and 70% of all fathers who were so classified, had the status of family worker. However, we need to keep in mind here the difficulties in interpreting this status in the Japanese case (see n. 12 above). It would, e.g., seem likely that as well as there being Japanese distinctiveness in the social organization of farming, we also encounter here some national specificity in procedures used in data collection. Thus, we would wish to regard the modification to the model that is in question as to some extent a data-correction factor as well as a means of capturing a

The second alteration to the model is required in order to accommodate an evidently very low propensity for the sons of service-class families in Japan to be downwardly mobile into the ranks of the industrial working class. This we would relate to the awareness—perhaps exaggerated awareness (see Ishida 1986)—of the importance of educational credentials in Japan and to the fact of unusually low chances of work-life counter-mobility back from manual employment to service-class positions, which we can illustrate from our own comparative data.¹⁵ A particular concern may then be suggested on the part of service-class families to protect their offspring from being forced into manual jobs from which there might be no escape and a corresponding readiness to devote resources to this end. For example, the practice would seem widespread of more advantaged parents buying additional private tutoring for their children in the attempt to ensure an education appropriate to white-collar employment (Fukutake 1982, pp. 209–11; Morishima 1982, pp. 182–83).

When the core model with the changes indicated was fitted to the Japanese data, an acceptable $G^2(S)$ value of 35.9 was produced.¹⁶ However, it further emerged that under this variant model the HI2 and IN2 terms were nonsignificant. These terms were therefore omitted and the model reestimated. The $G^2(S)$ and other results that were then returned are those in row 3 of table 3. (The levels matrices for this final version of the model are given in the Appendix.)

In table 4 we seek to show what are the more detailed implications for the pattern of Japanese social fluidity of the variant model that we propose. We report the parameter estimates for the model and give the interaction parameters that are produced under the model for each cell of the Japanese mobility table. Table 4 then corresponds to figure 2,

real societal difference. Corresponding modifications that might have been thought necessary in the IVc-VIIb and VIIb-IVc cells are not in fact required, chiefly, we would suppose, because it is among the family workers represented in the VIIb-VIIb cell that the proportion of "protracted inheritors" to true "family employees" is much the greatest.

¹⁵ The frequency of counter-mobility within the Japanese service class—as measured by the proportion of men of service-class origins who were themselves found in service-class positions after initial employment that had placed them in a different class position—is, in fact, high: 25% of all men of service-class origins, as compared with 23% in England and 16% in France, to take two nations in which counter-mobility is common by European standards. However, in Japan such counter-mobility is overwhelmingly via *nonmanual* entry positions, especially in class III (cf. text and n. 19 below). Of service-class sons entering employment in the manual positions of classes V+VI and VIIa, just over a third in England and just under a third in France were subsequently found back in the service class, but in Japan the proportion is less than a sixth.

¹⁶ Since the Japanese sample size is very close to 2,000, we also obtained an acceptable unstandardized G^2 value ($G^2 = 36.1$, $df = 28$, $P = .14$).

TABLE 4

PARAMETERS IN LOG-ADDITIVE FORM FOR EFFECTS IN THE VARIANT MODEL
FOR JAPAN AND RESULTING INTERACTION PARAMETERS IN THE CELLS OF THE
JAPANESE MOBILITY TABLE

	EFFECT							
	HI1	HI2	IN1	IN2	IN3	SE	AF1	AF2
Parameters	-.16	*	.74	*	.79 ^b	-.63	-.68 ^b	.37
Standard error.....	.07		.09		.29	.14	.17	.06
	I+II	III	IVa+b	IVc	V+VI	VIIa	VIIb	
I+II .....	.74	.21	.21	-.79	-.84	-.84	-1.47	
III .....	.21	.74	0	-.63	0	-.16	-.79	
IVa+b .....	.21	0	.74	-.26	0	-.16	-.79	
IVc	-.79	-.79	-.42	1.34	-.79	-.26	0	
V+VI	-.16	0	0	-.63	.74	.21	-.79	
VIIa	-.16	-.16	-.16	-.79	.21	.74	-.63	
VIIb	-1.47	-.79	-.79	-.16	-.79	-.26	1.53	

* Indicates parameters that initially returned a nonsignificant value at the 5% level and have then been omitted in reestimating the model

^b Indicates parameters directly affected by modification to the core model

which presented similar estimates derived from the core model.¹⁷ The four most important points to emerge from these results are given below.¹⁸

¹⁷ In the log-additive form, the model in fig. 2 becomes

$$\log F_{ij} = \lambda + \lambda_i^0 + \lambda_j^0 + \lambda_{a(i,j)}^{HI1} + \lambda_{b(i,j)}^{HI2} + \lambda_{c(i,j)}^{IN1} + \lambda_{d(i,j)}^{IN2} \\ + \lambda_{e(i,j)}^{IN3} + \lambda_{f(i,j)}^{SE} + \lambda_{g(i,j)}^{AF1} + \lambda_{h(i,j)}^{AF2} \quad (3)$$

The parameters in eq. (3) are then related to those in eq. (2) by

$$\tau_{m(i,j)} = e^{\lambda_{m(i,j)}}, \quad m = a \dots h.$$

The parameters for hierarchy and inheritance effects are presented *incrementally*; i.e., the value given for HI2 represents an increment on that for HI1, that for IN2 an increment on IN1, and that for IN3 an increment on IN2. However, this is not the case with the parameters for affinity effects, since AF1 refers to negative affinities and AF2 to positive affinities.

¹⁸ The model parameters estimated in table 4 cannot be statistically compared with those of fig. 2—i.e., by testing for the significance of differences between them—since we have, of course, modified the core model to fit the Japanese data. However, if we accept the models, it is meaningful to compare their parameters substantively. The cell-by-cell interaction parameters under the Japanese and core models are also not *directly* comparable. But they can be conveniently compared indirectly in relation to the level of “neutral” fluidity in each model, which, in the generalized linear interactive modeling program (GLIM) parameterization that we use, is set at zero.

1. The fact that, as noted above and as indicated in table 4, two terms can be dropped from our variant model for Japan does of course imply further deviations from core fluidity. However, as regards the insignificance of the HI2 term, this is in part offset—as may be seen by reference back to figure 1—by the inclusion of the AF1 (negative affinity) term in the I+II-VIIa cell. The main deviations that arise thus take the form of relatively low barriers to mobility between the service class and the two agricultural classes and a marked *asymmetry* in fluidity as between the service class and two divisions of industrial working class—low barriers to upward movement coexisting with high barriers to downward movement.

2. The insignificance of the IN2 term, taken together with the inclusion of the IN3 term in the VIIb-VIIb cell, is of greater consequence. It means in fact that in the Japanese case all nonagricultural classes have the same level of inheritance. Comparison of the cell values given in table 4 with those of figure 2 then shows that in Japan the propensity for immobility within classes III, V+VI, and VIIa—that is, among routine nonmanual employees and skilled and nonskilled industrial workers—is higher, relative to “neutral” fluidity, than under the core model. On the other hand, this propensity is correspondingly low within classes I+II and IVa+b, those of the service class and the petty bourgeoisie. Two factors that may in part account for this feature of Japanese fluidity can be noted. First, the line between class I+II and class III is particularly difficult to draw in the Japanese case because of the widespread practice in business and other organizations of young entrants being initially assigned to routine clerical grades even though they may be of graduate status and have been recruited specifically for, and will eventually move into, professional, administrative, or managerial positions (Cole and Tominaga 1976, p. 74).¹⁹ Second, intergenerational stability within class IVa+b is likely to be depressed in the Japanese case as a result of the role played by self-employment—especially homework—as a response to unemployment and also to retirement at around age 55, which is usual in Japanese industry (cf. Steven 1983, pp. 80–86; also Cole and Tominaga 1976, pp. 77–78).

3. The sector effect on mobility would appear to be well below core level in the Japanese case. This feature can be associated—as in several European societies, notably the FRG, Hungary, and Poland—with a

¹⁹ It might be suggested that Japanese distinctiveness is here again in part classificatory: young entrants are graded as clerks whose counterparts in Western nations would be more probably designated as professional, administrative, or managerial trainees. Hence, we might be exaggerating the extent of Japanese deviation from core fluidity. However, for our present purposes we think it safer to take the view that the classificatory difficulties that arise do reflect an actual difference in practice.

high frequency of part-time farming or, alternatively, the supplementing of farm-family incomes through various kinds of industrial work (Fukutake 1967, 1982, chap. 11), which would appear to be practices that typically reduce the barriers to intergenerational mobility between agricultural and nonagricultural classes.²⁰

4. In the final outcome, then, areas of both relatively low and relatively high fluidity are displayed within the Japanese pattern as represented by our model. In general, though the tendency is for somewhat less unequal mobility chances to be shown up than those implied by "core" fluidity. In particular, it may be observed from the comparison of figure 2 and table 4 that, in those *off-diagonal* cells where "neutral" fluidity is not indicated, Japan has values that are in fact closer to "neutral" fluidity than are the corresponding parameters under the core model in all cases but two—those indicating downward mobility from service-class origins into industrial working-class positions. To provide some overall assessment, we have computed the values of all 441 odds ratios that are implicit in the 7×7 mobility table, both under the core model and under the Japanese variant model as applied to the Japanese data. Comparing corresponding ratios, we find that, in 54% of cases, the Japanese value is the closer to 1—indicating higher fluidity than the core expectation—and in 40%, the further from 1—indicating lower fluidity—with the remaining values being identified.

Our results here could then be regarded as consistent with, though at the same time more differentiated than, those reported by Yamaguchi (1987) on the basis of a Japan-England-United States comparison. Thus, our finding that Japan tends to have high fluidity—relative to core expectations—apart from some high propensities for immobility is in line with Yamaguchi's suggestion that, overall, the Japanese pattern of social fluidity is "closer to quasi-independence" (1987, p. 489) than those of the other two nations he studies. However, Yamaguchi does not, for example, pick up the relatively low propensity for immobility among the petty bourgeoisie—the "status" categories on which his analysis is based do not take account of differences in employment relations; nor could his analysis reveal the low sectoral barrier that we have noted—he has only a single "farm" category treated as one of status—nor the marked asym-

²⁰ We would indeed expect that some, perhaps a majority, of the respondents to the 1975 SSM survey who reported their present occupation as being that of farmer, by virtue of the fact that they did own and farm land—and who are therefore coded to class IVc—were themselves also engaged in some form of paid employment outside farming. Information on such second jobs was not collected in the survey. For further discussion of the West German, Hungarian, and Polish cases, see Erikson and Goldthorpe (1978b).

metry in propensities for long-range mobility between the service class and working class.

Finally in this section we report on the results of two supplementary analyses that we have undertaken. The first was prompted by the possibility that even if, as we would suppose, the concept of class is applicable to Japanese society, we may still not have implemented our class schema in the way most appropriate to the Japanese case: in particular, we may not have given due recognition to the fact—which Nakane (1970) and many other commentators have emphasized—that the employment relations and conditions of Japanese workers are influenced as much, if not more, by the type and especially the *size* of the firm in which they are employed as by their own occupation or skill level (cf. Cole 1979; Clark 1979; and the discussion in Mouer and Sugimoto [1986], pp. 281–88).

To explore this possibility to some extent, we modified the form of our class schema so as to provide for a distinction between large and small firms. The dividing line was set at 300 employees, which is that most often used in official Japanese statistics for the manufacturing industry. Specifically, we recategorized respondents' and respondents' father's class positions in the following ways:

1. Where the employing firm was large, cases originally allocated to class III were transferred to class I+II—the assumption being that in large firms even routine nonmanual workers would tend to be more or less fully integrated, in terms of their employment relations and conditions, into administrative and managerial bureaucracies.
2. All cases allocated to classes V+VI and VIIa were reallocated to two new classes, V-VIIa (large) and V-VIIa (small)—the assumption here being that, so far as employment relations and conditions are concerned, the division within the industrial working class by size of firm is more consequential than that by skill.

With our mobility data organized on the basis of this modified version of the class schema, we then repeated the analyses described above. The main finding was that very little difference was made to the general pattern of our results. The core model, without fixed parameters, fitted slightly better ($G^2[S] = 51.0$ as against 53.8) but with a broadly similar pattern of residuals; and our preferred variant model then fitted somewhat less well ($G^2[S] = 45.4$ as against 39.5). We can thus say that we do not find any obvious indications that our class schema in its original form fails to give insight into some highly distinctive feature of Japanese social fluidity which attention to the size of employing firms would reveal.²¹

²¹ We also experimented by taking the dividing line between large and small firms as 1,000 employees—but in this case clearly less well fitting models resulted. In order to

The second supplementary analysis that we undertook was aimed at investigating the stability of the Japanese pattern of social fluidity in the light of claims, such as those made by Tominaga (1982; and see also 1969; 1979b), of relatively rapid change in the direction of greater openness. Ideally we would have wished to work with appropriate data from two or more mobility inquiries carried out at different times. However, since such data coded to our class schema were not available to us, we resorted to birth-cohort analysis of the data of the 1975 inquiry. We divided the sample into four cohorts—those of men born 1911–20, 1921–30, 1931–40, and 1941–50 (men born between 1951 and 1955, who were only 20–24 years old at the time of inquiry, were omitted); and, in order to maintain adequate cell counts, we resorted to the fivefold version of the class schema, as shown in table 1.²² We then fitted to the intergenerational mobility tables for our four cohorts what has elsewhere been referred to as the constant social fluidity (CSF) model (Erikson, Goldthorpe, and Portocarero 1983). This model is in fact identical to that of equation (1) above, but with cohort being substituted for nation. It thus states that, while an association will exist between origin and cohort and destination and cohort, as well as between origin and destination, no three-way interaction occurs: in other words, the set of odds ratios defining the association between origin and destination is identical across cohorts.

When applied to the Japanese data, this CSF model shows a rather satisfactory fit: G^2 is 49.0 ($P = .43$; df 48). The model misclassifies only 3.9% of all cases and accounts for 88.8% of the total origin–destination association. However, it is true that in this way we achieve only a “global” test of the hypothesis of constant fluidity, and the presence of various specific trends in fluidity, within an overall constancy, cannot be ruled out.

We therefore went on to consider a further model that provides for a linear trend in each of the 16 odds ratios in the basic set of our 5×5 tables; that is, the model allows each of these ratios to increase or decrease linearly across the four cohorts distinguished (for a similar model, see Goldthorpe [1987], pp. 78–85). When this model is applied to the Japanese data, the reduction in G^2 from the CSF model is not significant ($\Delta G^2 = 14.9$, $\Delta df = 16$, $P > .50$). Furthermore, inspection of the linear

obtain more conclusive results here, it would obviously be desirable to introduce organizational size into analyses of mobility data for European nations. Unfortunately, however, none of our European data sets have information on this variable for both respondents and fathers

²² Despite using the fivefold version of the class schema, a number of zero cells were found in the table, and we have added 0.1 to these cells. The addition, however, made no difference to the findings reported below.

trends displayed under the model in all the 100 odds ratios implicit in the 5×5 tables showed that only 31 went in the direction of greater fluidity—that is, moved toward a value of 1. A trend in the opposite direction was shown by 39 ratios, while the remaining 30 passed through 1—indicating a shift first toward but then away from greater fluidity or vice versa.

Finally, in view of well-known “identification” problems, we repeated the analyses described above but with respondents’ class of *first* employment substituted for present class, so that the possibility of trends could be examined over a fairly well defined life-cycle stage and any confounding by age effects be minimized. Our previous results were in all respects confirmed.²³

We may then conclude that Japanese relative mobility rates do display an essential constancy over the period covered by our data; insofar as any shifts have occurred, these data have not marked a steady movement toward greater fluidity but should rather be understood as minor and trendless fluctuations.²⁴

²³ For the CSF model, $G^2 = 44.8$, $df = 48$, $P = .60$. The improvement in fit made by providing for linear trends was again not significant ($\Delta G^2 = 5.3$, $\Delta df = 16$, $P > .90$), and of the trends displayed in the 100 odds ratios, 43 went toward and 39 away from greater fluidity, while 18 reversed.

²⁴ The question might be raised of what changes, if any, appear in the various effects specified in the Japanese variant of the core model if this is itself fitted to successive cohorts within our sample. It would of course be in principle possible for such changes to occur even while the pattern of relative rates—that is, of odds ratios—that was generated remained unaltered. The practical difficulty that we encounter in trying to answer this question is that we must of course work with the sevenfold version of the class schema (in terms of which the model is specified), and even if we then collapse our four cohorts to just two, e.g., to those of men born 1911–30 and 1931–50, the resulting tables are disturbingly sparse. However, from an exercise conducted on this basis, we find no significant differences from the earlier to the later cohort for the two inheritance effects or for the sectoral effect in the model, and we find a shift (increase) in the positive affinity term that is only marginally significant. The differences in which we would have greatest confidence occur in the two remaining terms: the hierarchy effect (H11) strengthens across the two cohorts while the negative affinity effect (the extended AFI term) weakens. These changes would then be consistent with a shift in fluidity patterns toward *closer* conformity with the core model—service-class sons showing, e.g., a reduced propensity to become farm workers but an increased propensity to become industrial workers. It may be noted that our results here fail to confirm Yamaguchi’s findings (1987), based on analyses of data from the 1975 Japanese mobility study and that of 1955, that diagonal (or in our terms, inheritance) effects decrease over time while the association between origins and destinations in off-diagonal cells tends generally to increase. However, our results as a whole are in broad agreement with those of other Japanese sociologists who have compared mobility tables based on the 1975 survey with ones based on the surveys of both 1955 and 1965. Thus, Kojima and Hamana (1984) have shown that the CSF model fits the mobility tables for 1955, 1965, and 1975 when these are organized on the basis of an eightfold occupational classification. The fit ceases to be acceptable if either a fivefold

Given, then, the results we have thus far presented in this article, how should the Japanese case be regarded from the standpoint of the FJH hypothesis (which, according to our understanding, claims that within the social fluidity patterns of industrial nations a large commonality prevails)? There is no doubt that, when set against the model of core fluidity that we have proposed, the Japanese pattern has its "peculiar" features. These however, in our view, can be better understood as variations on a common theme—represented by the core model—than as expressions of a national social structure that is in some way distinctive. A model developed from the experience of European societies does prove capable of reproducing Japanese mobility data to a very substantial extent.²⁵

In this regard, we would wish to emphasize, first, the relatively few modifications that need to be made to the form of the core model in order to produce a fitting variant for Japan; and, second, the fact that, while the overall extent of the Japanese deviation from the core pattern is more extensive than that found in *some* of the European nations we have studied (as is indicated in table 3), it could still scarcely be reckoned as extravagant. Thus, what we can at all events say is that the Japanese case does not create *special* problems for the FJH hypothesis in the sense in which we take it. If this hypothesis is to be rejected on the basis of the Japanese data, it could have been rejected already on the basis of the European data that we have previously analyzed.

On the other hand, we would note that arguments claiming that Japan is *sui generis* or possesses a quite different form of stratification to that found in European societies can draw little support from our findings. Thus, if it were the case, as Nakane (1970)—and also Tominaga (1982, 1988)—would maintain, that the "European" concept of class is inappropriate to the study of Japanese society, one would not expect an analysis that rests on this concept to produce results that are largely comparable to those achieved for European nations. Contrary to Nakane's claim

or threefold collapse of the classification is used (Iwamoto 1985; Tokuyasu 1986); but we have ourselves reexamined the 3×3 tables and find that the lack of fit comes largely from one source: a decline in the propensity for immobility among manual workers as between 1955 and 1965. Even then, if one accepts this effect as being real, it is still scarcely sufficient evidence for claiming a *general* and *continuous* increase in fluidity within postwar Japanese society.

²⁵ It may of course be asked just what, in this context, do phrases like "a very substantial extent" imply. Perhaps the best response is to note that if we were to take as our Japanese mobility table that constituted by the expected values under our core model fitted with *fixed* parameters (as in row 1 of table 3), and if we were then to compute inflow and outflow rates from this table, the main distinctive features of these rates, as compared with those for our European nations, would be overall very much the same as those on which we go on to comment in the text below in referring to the *actual* Japanese table.

that class as a form of social stratification is "unlikely to function" in Japan and "does not really reflect the social structure" (1970, p. 87), we would see in our findings clear evidence that a class structure does indeed function in Japan, and it functions in much the same way as in other industrial societies, to generate a pattern of unequal mobility chances. We do not, we should stress, seek here to challenge the contention that class consciousness, or even class awareness, is only rather weakly developed among the Japanese population. But what we do wish to maintain is, first, that sociologists need not be restricted in the concepts they apply to those that are prevalent among the "lay members" of the societies they study; and, second, that class is in any event a concept relevant not only to how individuals view the social world and act within it but also to *what actually happens to them*—in the present context, to what chances of mobility or immobility they have experienced or may expect.

Again, if we assume that Tominaga (1982) is suggesting that Japan, together with the United States, is outstanding in showing how these inequalities are diminished by the onward march of industrialism, our evidence is once more uncongenial. As we have shown, social fluidity in Japan does tend to be somewhat above the level provided for by the core model, and Japan could certainly be regarded as a more "open" society than some European ones; even so, it can scarcely claim preeminence. Thus, if we calculate odds ratios under our national variant model for Sweden, we find that a still-larger proportion of odds ratios fall below "core" expectations than in the Japanese case—83% as against the 54% reported above.²⁶ Furthermore, we have also failed to find support for the argument to which Tominaga is more obviously committed: that social fluidity in Japan is, at all events, on a steadily rising trend. To the contrary, our results would indicate that, despite the rapid economic growth and structural change that have characterized modern Japan, a large measure of stability has in fact been preserved in the pattern of its social fluidity—just as, it may be noted, the FJH hypothesis would imply.

ABSOLUTE RATES

We would not, then, regard Japanese social fluidity as being sufficiently deviant from "core" expectations to undermine the FJH hypothesis in

²⁶ It might be suggested that to find Sweden showing greater fluidity than Japan is not all that surprising in the light of theories of convergent industrialism since, at least up to the 1970s, Sweden could in fact claim a higher level of development—as measured, say, by real GNP per capita. However, it may further be noted that odds ratios calculated under the national variant model for Poland—with a real GNP per capita of about a third less than Japan in 1970—are below core expectations in 59% of all cases.

the version that we have adopted; or, at all events, no further qualifications to the hypothesis would seem required to those that have already been suggested on the basis of analyses of mobility in European nations (Erikson and Goldthorpe 1987a, 1987b). However, if we now wish to focus our attention on the more general issue of the "exceptionalism" of Japan as an industrial society, we must examine not only social fluidity or the pattern of relative mobility rates, but also absolute rates. As we noted earlier, FJH complement their claim of a basic cross-national similarity in relative rates with the argument that, pace Lipset and Zetterberg (1959), absolute rates can be expected to vary widely under the influence of diverse "exogenous" factors. Thus, Japan could still be distinctive in terms of this variation even though conforming to the generic pattern in its "endogenous mobility regime."

To begin with, we may consider total mobility rates. In the Japanese 7 × 7 intergenerational class mobility table, the proportion of respondents whose present class is different from their class of origin—that is, who are found in cells off the main diagonal of the table—is 73%. The range of total mobility rates for nine European nations is from 54% to 76%. Thus, while Japan tends toward the higher end of the range—with a rate that exceeds those of seven out of nine European nations but falls below those of Hungary and Sweden—no very compelling evidence of exceptionalism is here provided.

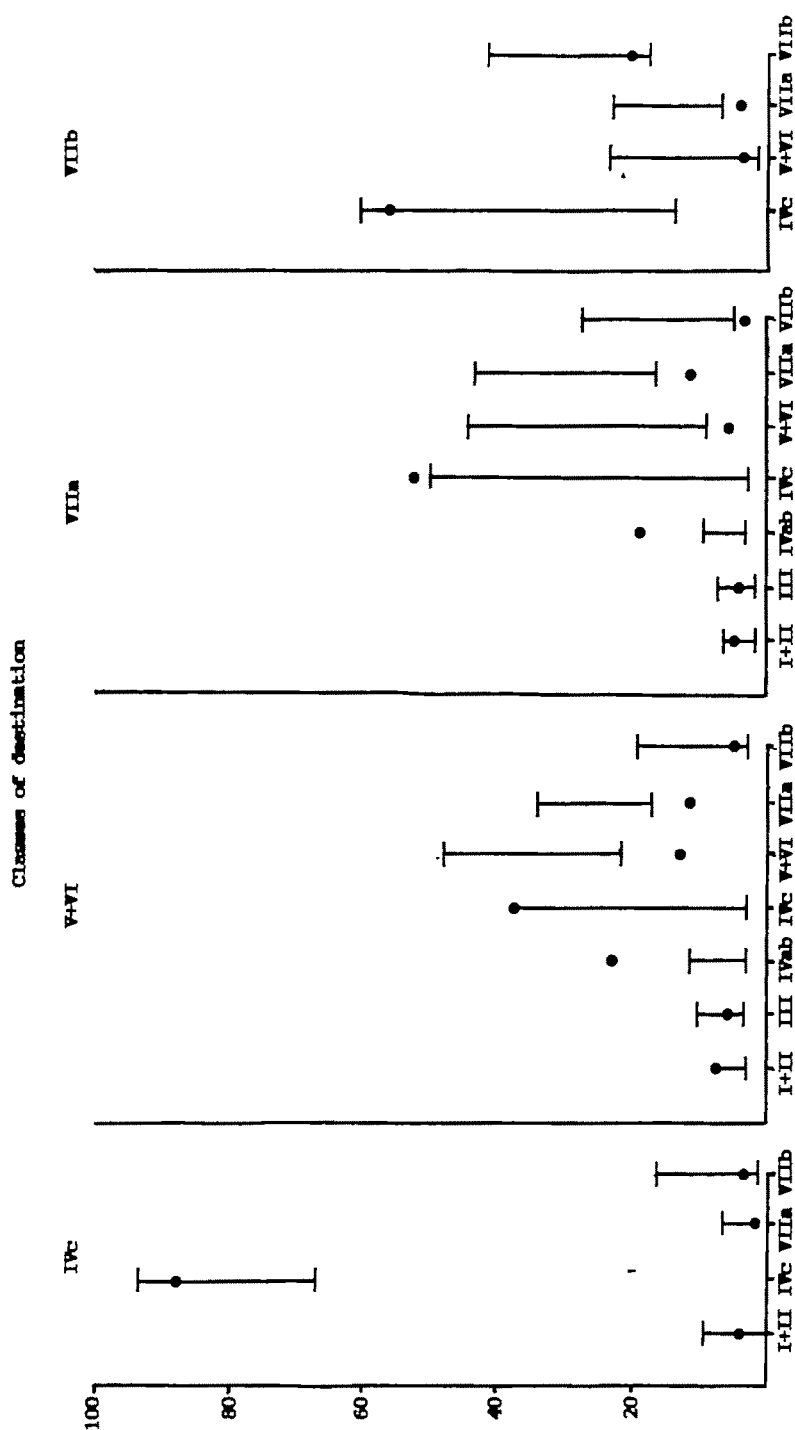
However, if we turn next to inflow and outflow mobility rates, a somewhat different picture emerges. Rather than attempting to present these rates in full, we resort, in figures 3 and 4, to graphic methods in order to show the Japanese rates in relation to the corresponding European ones. From both of these figures it is in fact apparent that the Japanese data are not easily assimilated into the European pattern. With 18 of the 43 inflow rates represented in figure 3 (flows not exceeding 5% in any nation are excluded), the Japanese value falls outside the European range; and this is likewise the case with 15 of the 39 outflow rates that are represented in figure 4. Moreover, these departures from the European pattern are of a rather systematic kind.

Thus, more detailed examination of figure 3 will reveal that, of the 18 instances of outlying Japanese inflow rates, five feature inflow from class IVa + b (the petty bourgeoisie) that is greater than in any European nation, and a further 10 feature inflow from class V + VI or class VIIa (the two divisions of the industrial working class) that is less. And similarly, of the 15 outlying outflow rates in figure 4, five feature outflow to class III (routine nonmanual employees) that is above the European range, and seven more demonstrate outflow to either class V + VI or class VIIa below the European range. On this basis, then, and from other information contained in figures 3 and 4, it is possible to draw a number of more

general conclusions concerning the distinctiveness of class formation or "reproduction" in modern Japanese society, especially as regards the service class and the working class.

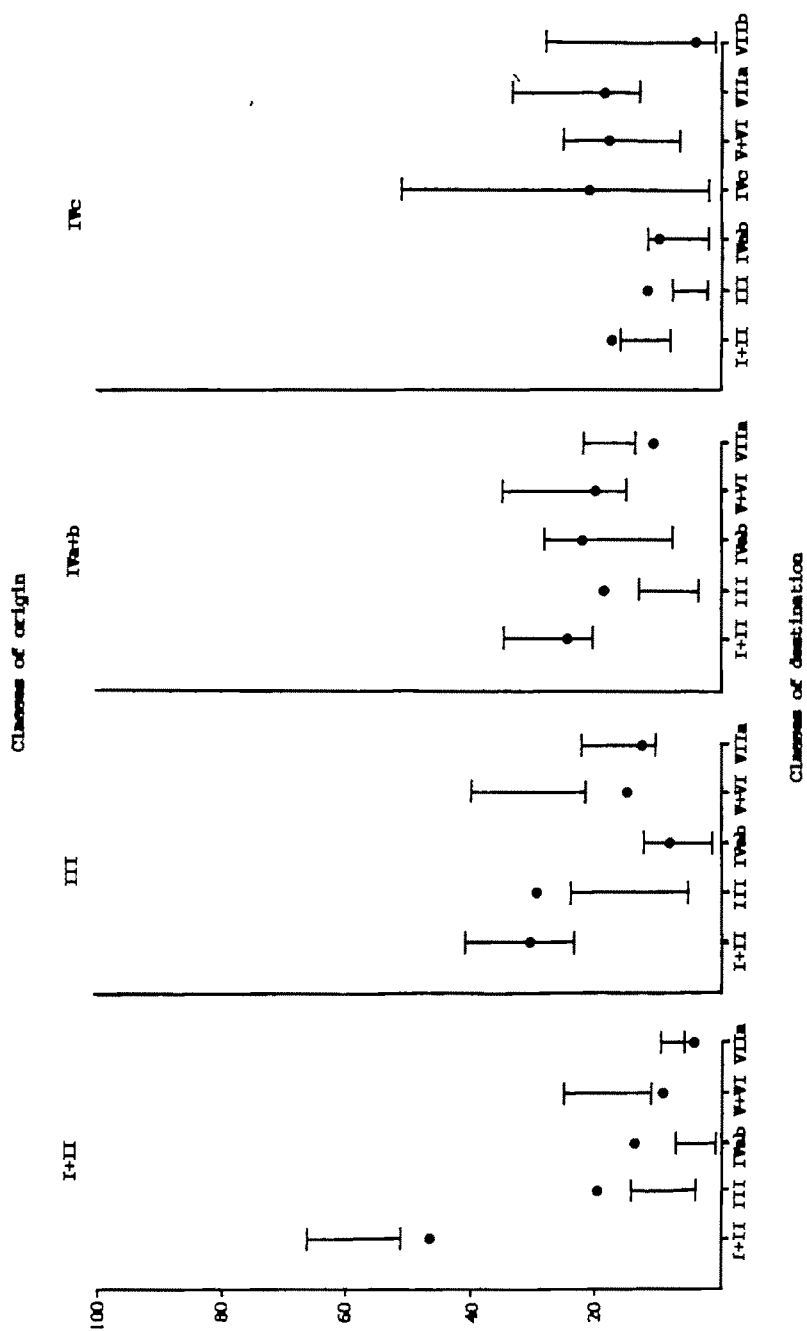
The Japanese service class is, to begin with, quite clearly set apart from those of European nations in the pattern of its recruitment. The class not only comprises an exceptional proportion of men of petty-bourgeois origins, it tends also, as figure 3 indicates, to recruit heavily from among the sons of farmers. Thus, of men found in class I+II within the Japanese sample, as many as 55% reported fathers who were engaged in proprietorship or self-employment of some kind. This may be set against a European range of from only 12% to 38%. Offsetting this, and in turn a source of further distinctiveness, is then the very limited degree to which the Japanese service class includes men of working-class origins: only 10% of its members had fathers in classes V+VI and VIIa, as compared with from 28% to 49% among our European nations. At the same time, the intergenerational stability of the Japanese service class would appear, in the light of figure 4, to be unusually low: only 47% of the sons of service-class fathers are themselves found in service-class positions as against a European range of 52%–67%. However, if, for reasons noted above, we regard class III as being more closely associated with class I+II in Japan than in most of our European nations, a rather different conclusion is suggested. Intergenerational stability within the white-collar bloc, which is constituted by classes I+II and III together, turns out to be quite high in Japan: 65% of the sons of white-collar fathers are found in white-collar positions and only 19% in the working-class positions of classes V+VI and VIIa. This may be compared with the corresponding European ranges of 52%–64% and 28%–43%, respectively.

Turning, then, to the Japanese working class, the feature that is most obviously distinctive is the very low level of its self-recruitment. In this respect, our European nations themselves show wide variation—the proportions of industrial workers who are the sons of industrial workers extending from 78% down to 39%. However, the Japanese figure is lower still, at only 21%. In just the same way as the service class, the Japanese working class is far more extensively recruited than would seem typical in Europe from among the sons of the petty bourgeoisie and farmers: 65% of men in classes V+VI and VIIa in the Japanese sample were of class IVa+b or IVc origins as against a European range of from only 7% to 45%. Moreover, the Japanese working class is also distinctive in its low level of intergenerational stability. In our European nations, from 61% to 73% of the sons of working-class fathers were themselves found in working-class positions; but the corresponding figure for Japan is only 56%. If, then, its low self-recruitment *and* its low stability are taken



Classes of origin

FIG. 3.—Percentage inflow rates for Japan (as indicated by black dot) compared with the range for nine European nations (indicated by vertical lines). Flows not exceeding 5% in any nation are excluded.



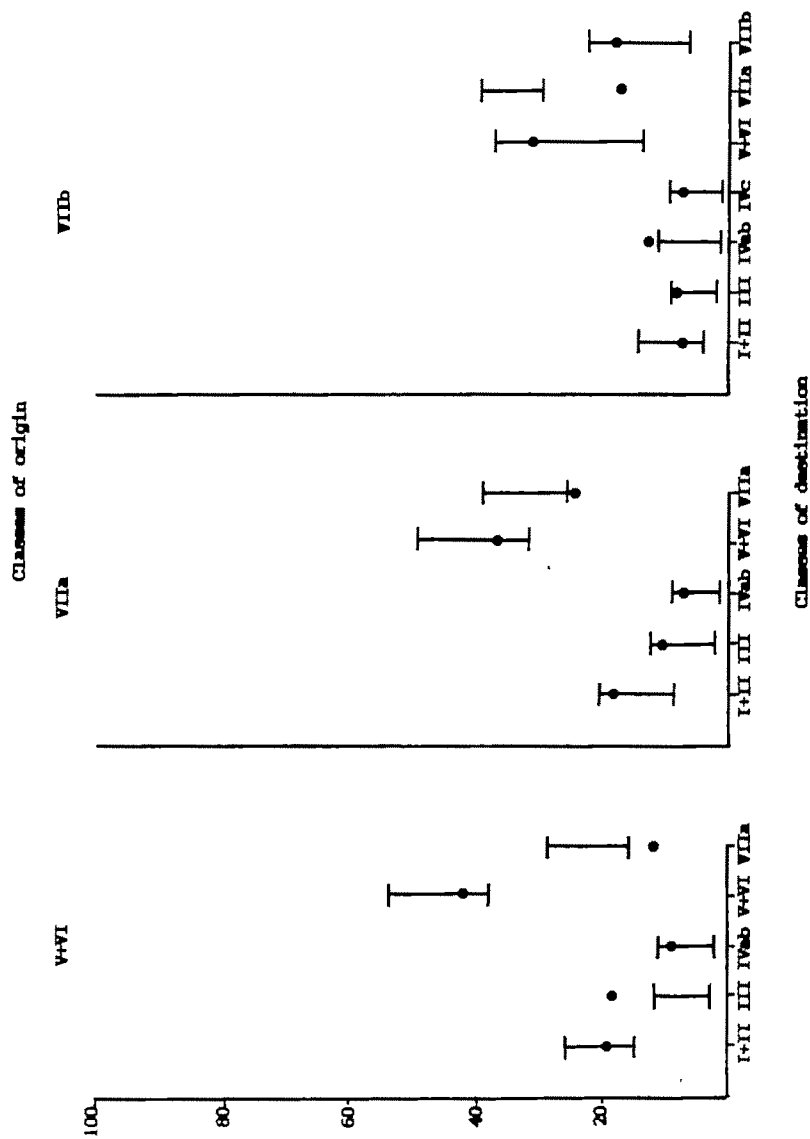


FIG. 4.—Percentage outflow rates for Japan (as indicated by black dot) compared with the range for nine European nations (indicated by vertical lines). Flows not exceeding 5% in any nation are excluded.

together, the "social metabolism" of the Japanese working class must be reckoned as falling clearly outside the European experience. Unlike the white-collar bloc, which, on a comparative view, would appear to have formed as a rather stable collectivity, the working class that has emerged in modern Japan must be said to possess only a very poorly developed "demographic identity" (Goldthorpe 1985a, 1987). And it is then, one may add, a rather obvious speculation that the small proportion of manual workers in Japan who could be regarded, in Sorokin's terms (1959, chap. 17), as being *both* "hereditary" and "lifetime" proletarians is a factor in the existence of only a weakly developed working-class consciousness alongside a "relatively strong middle-strata consciousness" that has been described by several Japanese investigators (see, e.g., Murakami 1984).

Thus, at the "phenotypical" level of absolute mobility rates, a case for Japanese distinctiveness can indeed be made out—even while maintaining that at the "genotypical" level of relative rates Japan, along with other industrial nations, shares in a largely common pattern. What is of course implied by such a position is that the source of this Japanese distinctiveness must be traced primarily to the "shape" of the Japanese class structure and to trends of class structural change during the modern period. This point is in fact one that we can bring out empirically in the data of table 2.

From this table, an association is readily apparent between those features of the Japanese distributions of class origins and destinations that depart most sharply from the European pattern and those features of Japanese inflow and outflow rates that chiefly attracted our attention above. Thus, the tendency for inflows to be high from class IVa + b and low from classes V + VI and VIIa can be related to the proportion of our Japanese sample with petty-bourgeois fathers being well above the European range while that with working-class fathers is well below it. And, likewise, the tendency for outflows to be high to class III and low to classes V + VI and VIIa can be related to—by European standards—the unusually large proportion of our Japanese sample found in routine non-manual positions and the small proportion in manual ones.

It should therefore be clear enough that, if we wish to account for Japanese distinctiveness in absolute rates of intergenerational class mobility, we must account for the historical development of the Japanese class structure rather than for any special features in Japanese social fluidity.²⁷ To attempt such a task in any detail must of course lie beyond the scope

²⁷ To lend greater force to this observation, we may again refer to the point made in n. 24 above.

of the present article, but there are two points of a general and preliminary kind that, given the purposes at hand, seem relevant.

First, some insights are to be gained from "patterns of growth" analysis and, specifically, from recognizing the trajectory of development followed by Japan as a "latecomer" to the process of industrialization. Most important, it is in this way that the relatively small size of the Japanese working class can best be understood. In nations that industrialized early—for example, England and Scotland—the period of rapid decline in the agricultural work force was accompanied by a massive transfer of labor into manual, wage-earning jobs in industry, and it was only at a later stage that a significant expansion in white-collar employment began (Goldthorpe 1987, chap. 11). In Japan, in contrast, the phasing of these changes has been far more compressed. The decline in agriculture has gone together with a marked increase in white collar as well as blue-collar employment, and the latter would, moreover, seem already to have reached its peak. As a latecomer, Japan experienced a rather precocious growth of large industrial and commercial bureaucracies and hence of white-collar positions (Dore 1973; Cole and Tominaga 1976, pp. 76–82); on the other hand, the latecomer's advantage of being able to take over advanced, labor-saving technology, in manufacturing industry especially, has allowed Japan to "catch up" in its economic development without ever needing an industrial working class of the size that typically emerged in Western nations (Singlemann 1978; Gagliani 1985)—even though, we should note, table 2 may well exaggerate this difference in relating only to men.²⁸

Second, though, it would also seem essential to take into account influences shaping the Japanese class structure that are of a more specific kind than could be captured by the "patterns of growth" analysis. Thus, for example, one must recognize the persistence into the stage of advanced industrialism of a still relatively numerous petty bourgeoisie. Small-scale, and usually familial, business enterprises would appear to have survived in Japan to a greater extent than in most Western industrial societies (Hara 1979; Patrick and Rohlen 1987). Many such enterprises are in the service sector, but small-scale manufacturing also remains important within the context of the much-discussed "dualism" of

²⁸ It would seem clear that, especially in the early 20th century, women workers, above all young unmarried women from farm families, have formed an unusually important component of the Japanese industrial work force. On the textiles industry especially, see Saxenhouse (1976). We should add that in introducing here the idea of Japan as a latecomer, we are concerned only with effects on the development of the Japanese occupational structure and not with the contested "latecomer hypothesis" in regard to the origins of the Japanese employment system (see Dore 1973, chaps. 14 and 15; Cole 1979, pp. 29–32).

Japanese industrial structure. In part, this reflects a continuing high demand for traditional as well as for modern consumer goods; but small firms are also often involved in symbiotic relationships with larger ones through complex systems of subcontracting, a practice often initiated by large firms as a means of achieving greater operating flexibility (Broadbridge 1966; Morishima 1982, pp. 101–23). Then again, the relatively large numbers of men found in Japan as routine nonmanual employees would appear to reflect rather distinctive aspects of Japanese managerial practice. We have already referred to the use of clerical work as a training ground for recruits intended for higher-level positions. But, in addition, Japanese employers would appear to have been less ready than their European counterparts to accept the general “feminization” of clerical employment (see, e.g., Cole and Tominaga 1976, pp. 74–75). In sum, therefore, what may be suggested is that, insofar as they exist, Japanese “peculiarities” are of greater influence on Japanese mobility rates through their effects *in shaping the class structure itself*, rather than in modifying the patterns of relative mobility chances that prevail within it.

CONCLUSIONS

In this article, we have had two main objectives. First, we have sought to use the Japanese case in order to provide a further test of the FJH hypothesis. Taking this hypothesis to claim that industrial societies are characterized by a common or core pattern of relative rates of intergenerational mobility—for which we have provided a formal model—we know that the hypothesis receives some measure of support from mobility data for a number of European societies. Here, then, we have asked whether a similar outcome is achieved when we turn to Japan, the leading industrial nation outside the European cultural sphere. Second, we have attempted to draw on our analyses of Japanese mobility data in order to contribute to the wider debate on Japanese exceptionalism. In this debate, questions concerning the nature of Japanese social stratification have held a prominent place, and assessments of inequalities of condition and opportunity in present-day Japan within a comparative perspective have been implied, if not systematically presented.

Evidently, then, the issues that we address are not independent of each other. Indeed, as we have noted, positions already taken up in the literature would lead one to expect that the FJH hypothesis would not in fact show up as well against Japanese as against European data *because* the Japanese form of industrial society is a distinctive one. However, it is perhaps when compared with such expectations that the results we have reported take on greatest interest. For our two main findings

are (1) that the Japanese case does not appear to create any special problems for the FJH hypothesis *but* (2) that an argument for the distinctiveness of Japanese mobility rates, and in turn processes of class formation or reproduction, can nonetheless be made—at least in relation to European experience.

As regards relative rates, our analyses of data from the 1975 SSM survey indicate that Japan does not display any greater deviations from our model of core social fluidity than those found among European nations. That is to say, Japanese peculiarities in relative rates can be detected, but they are no greater than, say, West German, Hungarian, Irish, or Polish peculiarities; and there would thus seem little basis for proposing a distinctive Japanese *type* of fluidity pattern, rather than seeing Japanese fluidity as representing simply another national variation on the common theme that our core model serves to define. Furthermore, such a finding must throw doubt on larger claims either that Japanese social stratification is *sui generis* and not amenable to analysis via the concepts of Western sociology or that it represents a particularly advanced version of a generic form—for example, in the degree of equality in relative mobility chances that it allows. To repeat, then, the point we made earlier: our analyses of Japanese mobility at all events *add nothing* to the argument for rejecting, or qualifying, the FJH hypothesis and hence do not lead us to change the assessment of the FJH hypothesis that was made on the basis of our European data and that we summarized at the start of this article.

It is when we shift attention from relative to absolute mobility rates that the case for Japanese distinctiveness emerges. Although the Japanese total mobility rate is not exceptional, inflow and outflow rates alike show departures from the ranges established by our European data that are frequent and systematic; and, in turn, patterns of intergenerational recruitment and stability, among the Japanese service class and working class especially, are likewise set apart from the European experience. This result is chiefly produced, as we have shown, through the Japanese “mobility regime,” which is not itself unusually deviant from our core model, operating within a class structure that, in the course of industrialization, has developed in a very different way from the class structures of our European nations. In part, this reflects Japan’s status as a late-comer; but furthermore, as we have suggested, it is in this respect that some scope does exist for Japanese institutional specificities to be invoked.

Thus, rather than calling the FJH hypothesis into greater doubt, the Japanese case may serve in the end to underline the importance of the insight that this hypothesis expresses. That is to say, if cross-national regularities in social mobility are to be discovered, this will not be at the

level of absolute rates—where the many and diverse exogenous factors at work are likely to remain outside the scope of sociological generalization. Rather, such regularities must be sought at the level of relative rates where, so to speak, such exogenous factors are “stripped out” and where, thus, if the stratification of industrial societies does possess generic features, these will be the more readily revealed.

APPENDIX

Levels Matrices for the Model of Core Social Fluidity and for the Japanese Variant

The matrices for the hierarchy (HI), inheritance (IN), sector (SE), and affinity (AF) effects in the core model and in the Japanese variant are as shown in figure A1.

It should be noted that in the case of HI and IN, a separate matrix is provided for each *shift* in the level of the effect. For example, since—as is indicated in figure 1—we aim to capture hierarchy effects on the basis of a threefold division of our class schema, we need here two matrices. In HI1, we put at level 1 cells that imply no hierarchical mobility, and at level 2 all those that do imply such mobility. Then in HI2 we put at level 2 those cells that imply a “two-step” movement—that is, from the highest hierarchical division to the lowest or vice versa—while all other cells go to level 1. Correspondingly, the three IN matrices should be interpreted as providing for a base level of inheritance effects and for two shifts from this to higher-level inheritance effects. In the case of SE, on the other hand, there is only one level of effect, and the two AF effects are seen as going in opposite directions, AF1 relating to negative and AF2 to positive affinities.

Each matrix relates, of course, to the cells of the 7×7 class mobility table, and the term above each is that by which the effect it represents is indexed in our model as expressed by equation (2) in the text. For further details, see Erikson and Goldthorpe (1987a).

CORE	JAPAN
HI1 ($a(i, j)$)	
1 2 2 2 2 2 2	as core
2 1 1 1 1 2 2	
2 1 1 1 1 2 2	
2 2 2 2 2 1 1	
2 1 1 1 1 2 2	
2 2 2 2 2 1 1	
2 2 2 2 2 1 1	
HI2 ($b(i, j)$)	
1 1 1 1 1 2 2	omitted (n.s.)
1 1 1 1 1 1 1	
1 1 1 1 1 1 1	
2 1 1 1 1 1 1	
1 1 1 1 1 1 1	
2 1 1 1 1 1 1	
2 1 1 1 1 1 1	
IN1 ($c(i, j)$)	
2 1 1 1 1 1 1	as core
1 2 1 1 1 1 1	
1 1 2 1 1 1 1	
1 1 1 2 1 1 1	
1 1 1 1 2 1 1	
1 1 1 1 1 2 1	
1 1 1 1 1 1 2	
IN2 ($d(i, j)$)	
2 1 1 1 1 1 1	omitted (n.s.)
1 1 1 1 1 1 1	
1 1 2 1 1 1 1	
1 1 1 2 1 1 1	
1 1 1 1 1 1 1	
1 1 1 1 1 1 1	
1 1 1 1 1 1 1	

FIG. A1.—Comparison of matrices for the core model and the Japanese variant (continued, next page).

IN3 ($\alpha(i, j)$)

1 1 1 1 1 1 1	1 1 1 1 1 1 1
1 1 1 1 1 1 1	1 1 1 1 1 1 1
1 1 1 1 1 1 1	1 1 1 1 1 1 1
1 1 1 2 1 1 1	1 1 1 2 1 1 1
1 1 1 1 1 1 1	1 1 1 1 1 1 1
1 1 1 1 1 1 1	1 1 1 1 1 1 1
1 1 1 1 1 1 1	1 1 1 1 1 1 2

SE ($f(i, j)$)

1 1 1 2 1 1 2	as core
1 1 1 2 1 1 2	
1 1 1 2 1 1 2	
2 2 2 1 2 2 1	
1 1 1 2 1 1 2	
1 1 1 2 1 1 2	
2 2 2 1 2 2 1	

AF1 ($g(i, j)$)

1 1 1 1 1 1 2	1 1 1 1 2 2 2
1 1 1 1 1 1 1	1 1 1 1 1 1 1
1 1 1 1 1 1 1	1 1 1 1 1 1 1
1 1 1 1 1 1 1	1 1 1 1 1 1 1
1 1 1 1 1 1 1	1 1 1 1 1 1 1
1 1 1 1 1 1 1	1 1 1 1 1 1 1
2 1 1 1 1 1 1	2 1 1 1 1 1 1

AF2 ($h(i, j)$)

1 2 2 1 1 1 1	as core
2 1 1 1 1 1 1	
2 1 1 2 1 1 1	
1 1 2 1 1 2 1	
1 1 1 1 1 2 1	
1 1 1 1 2 1 1	
1 1 1 1 1 2 1	

FIG. A1.—Continued.

REFERENCES

- Ando, Bunshiro. 1978. "Hyohon Sekkei" (Sample design). Pp. 16–28 in *Shakai Kaiso to Shakai Ido* (Social stratification and social mobility), edited by the 1975 SSM Committee. Tokyo: 1975 SSM Committee.
- Bennet, John W. 1967. "Japanese Economic Growth: Background for Social Change." Pp. 411–53 in *Aspects of Social Change in Modern Japan*, edited by Ronald P. Dore. Princeton, N.J.: Princeton University Press.
- Broadbridge, Seymour. 1966. *Industrial Dualism in Japan*. London: Cass.
- Clark, Rodney. 1979. *The Japanese Company*. New Haven, Conn.: Yale University Press.
- Cole, Robert E. 1979. *Work, Mobility and Participation: A Comparative Study of American and Japanese Industry*. Berkeley: University of California Press.

- Cole, Robert E., and Ken'ichi Tominaga. 1976. "Japan's Changing Occupational Structure and Its Significance." Pp. 53-95 in *Japanese Industrialization and Its Social Consequences*, edited by Hugh Patrick. Berkeley: University of California Press.
- Dale, Peter N. 1986. *The Myth of Japanese Uniqueness*. New York: St. Martin's.
- Dore, Ronald P. 1973. *British Factory—Japanese Factory*. Berkeley: University of California Press.
- . 1978. *Shinohata*. New York: Pantheon.
- Erikson, Robert, and John H. Goldthorpe. 1987a. "Commonality and Variation in Social Fluidity in Industrial Nations. Part I: A Model for Evaluating the 'FJH Hypothesis.'" *European Sociological Review* 3:54-77.
- . 1987b. "Commonality and Variation in Social Fluidity in Industrial Nations. Part II: The Model of Core Social Fluidity Applied." *European Sociological Review* 3:145-66.
- Erikson, Robert, John H. Goldthorpe, and Lucienne Portocararo. 1983. "Intergenerational Class Mobility and the Convergence Thesis." *British Journal of Sociology* 34:303-43.
- Featherman, David L., F. Lancaster Jones, and Robert M. Hauser. 1975. "Assumptions of Social Mobility Research in the U.S.: The Case of Occupational Status." *Social Science Research* 4:339-60.
- Fukutake, Tadashi. 1967. *Japanese Rural Society*. Ithaca, N.Y.: Cornell University Press.
- . 1982. *The Japanese Social Structure*. Tokyo: University of Tokyo Press.
- Gaglianl, Giorgio. 1985. "Long-Term Changes in the Occupational Structure." *European Sociological Review* 1:183-210.
- Goldthorpe, John H. 1982. "On the Service Class, Its Formation and Future." Pp. 162-85 in *Social Class and the Division of Labour*, edited by Anthony Giddens and Gavin Mackenzie. Cambridge: Cambridge University Press.
- . 1985a. "Soziale Mobilität und Klassenbildung: Zur Erneuerung einer Tradition soziologischer Forschung." Pp. 174-204 in *Die Analyse Sozialer Ungleichheit*, edited by Hermann Strasser and John H. Goldthorpe. Opladen: Westdeutscher Verlag.
- . 1985b. "On Economic Development and Social Mobility." *British Journal of Sociology* 36:549-73.
- Goldthorpe, John H., in collaboration with Catriona Llewellyn and Clive Payne. 1987. *Social Mobility and Class Structure in Modern Britain*, 2d rev. and enlarged ed. Oxford: Clarendon.
- Grusky, David B., and Robert M. Hauser. 1984. "Comparative Social Mobility Revisited: Models of Convergence and Divergence in 16 Countries." *American Sociological Review* 49:19-38.
- Hara, Akira. 1979. "Kaikyū Kōsei no Shinsuikēi" (A new estimation of class composition between the two wars), edited by Yoshio Ando. Tokyo: Todai Shuppan Kai.
- Hout, Michael. 1983. *Mobility Tables*. Beverly Hills, Calif.: Sage.
- Ishida, Hiroshi. 1986. "Educational Credentials, Class, and the Labor Market: A Comparative Study of Social Mobility in Japan and the United States." Ph.D. dissertation. Harvard University, Department of Sociology.
- Iwamoto, Takeyoshi. 1985. "Sedaikan Ido no Susei Bunseki" (Trend analysis of intergenerational mobility). Pp. 215-28 in *Suri Shakaigaku no Gensai* (Contemporary mathematical sociology), edited by Junsuke Hara and Michio Umino. Tokyo: Suri Shakaigaku Kenkyukai.
- Kojima, Hideo, and Atsushi Hamana. 1984. "Shokugyo Ido no Keiko Bunseki" (Trend analysis of occupational mobility). *Ibaraki Daigaku Kyoiku Gakubu Kiyo* 33:17-32.

- Lipset, S. M., and Hans L. Zetterberg. 1959. "Social Mobility in Industrial Societies." Pp. 11-75 in *Social Mobility in Industrial Society*, edited by S. M. Lipset and Reinhard Bendix. Berkeley: University of California Press.
- Morishima, Michio. 1982. *Why Has Japan "Succeeded"?* Cambridge: Cambridge University Press.
- Mouer, Ross, and Yoshio Sugimoto. 1986. *Images of Japanese Society*. London: KPI.
- Murakami, Yasusuke. 1984. *Shin Chukan Taishu no Jidai* (The age of new middle mass). Tokyo: Chuo Koronsha.
- Nakane, Chie. 1970. *Japanese Society*. Berkeley: University of California Press.
- Patrick, Hugh, and Thomas Rohlen. 1987. "Small-Scale Family Enterprises." Pp. 331-84 in *The Political Economy of Japan*, Vol. 1: *The Domestic Transformation*, edited by Kozo Yamamura and Yasukichi Yasuba. Stanford, Calif.: Stanford University Press.
- Saxenhouse, Gary P. 1976. "Country Girls and Communication among Competitors in the Japanese Cotton-spinning Industry." Pp. 97-125 in *Japanese Industrialisation and Its Social Consequences*, edited by Hugh Patrick. Berkeley: University of California Press.
- Singlemann, Joachim. 1978. *From Agriculture to Services: The Transformation of Industrial Employment*. Beverly Hills, Calif.: Sage.
- Sorokin, Pitirim A. 1959. *Social and Cultural Mobility*. Glencoe, Ill.: Free Press.
- Steven, Rob. 1983. *Classes in Contemporary Japan*. Cambridge: Cambridge University Press.
- Suzuki, Tatsuo. 1978. "Hyohon Seldo" (Sample accuracy). Pp. 16-28 in *Shakai Kaiso to Shakai Ido* (Social stratification and social mobility), edited by the 1975 SSM Committee. Tokyo: 1975 SSM Committee.
- Tokuyasu, Akira. 1986. "Nihon ni okeru Sangyoka to Sodaikan no Susei Bunseki" (Industrialization and trends in intergenerational mobility in Japan). Pp. 101-11 in *Shakai Kaiso no Susei to Hikaku* (Trends and comparisons of social stratification), edited by Ken'ichi Tominaga. Tokyo: SSM Susei to Hikaku Kenkyukai.
- Tominaga, Ken'ichi. 1969. "Trend Analysis of Social Stratification and Social Mobility in Contemporary Japan." *Developing Economies* 7:471-98.
- . 1979a. "Shakai Kaiso to Shakai Ido eno Apurochi" (Approaches to social stratification and social mobility). Pp. 3-29 in *Nihon no Kaiso Koso* (The structure of social stratification in Japan), edited by Ken'ichi Tominaga. Tokyo: Todai Shuppan Kai.
- . 1979b. "Shakai Kaiso to Shakai Ido no Susei Bunseki" (Trend analysis of social stratification and mobility). Pp. 33-87 in *Nihon no Kaiso Koso* (The structure of social stratification in Japan), edited by Ken'ichi Tominaga. Tokyo: Todai Shuppan Kai.
- . 1982. "Problems of Viewpoint in Interpreting Japanese Society: Japan and the West." *Ostasiatisches Seminar, Freie Universität Berlin, Occasional Papers* no. 38.
- . 1988. *Nihon Sangyo Shakai no Tenki* (Change in Japanese industrial society). Tokyo: Todai Shuppan Kai.
- Tominaga, Ken'ichi, Atsushi Naol, and Takatoshi Imada. n.d. "Current Trends in Studies of Social Stratification and Mobility in Japan." University of Tokyo.
- Vogel, Ezra F. 1967. "Kinship Structure, Migration to the City, and Modernization." Pp. 91-111 in *Aspects of Social Change in Modern Japan*, edited by Ronald P. Dore. Princeton, N.J.: Princeton University Press.
- Yamaguchi, Kazuo. 1987. "Models for Comparing Mobility Tables: Towards Parsimony and Substance." *American Sociological Review* 52:482-94.

Commentary and Debate

To conserve space for the publication of original contributions to scholarship, the comments in this section must be limited to brief critiques. They are expected to address specific errors or flaws in articles and reviews published in the *AJS*. Comments on articles are not to exceed 1,500 words, those on reviews 750 words. Longer or less narrowly focused critiques should be submitted as articles. Authors of articles and reviews are invited to reply to comments, keeping their replies to the length of the specific comment. The *AJS* does not publish commenters' rebuttals to authors' replies. We reserve the right to reject inappropriate or excessively minor comments.

STATE AND BUSINESS IN POSTWAR TAIWAN: COMMENT ON HAMILTON AND BIGGART

In their recent article, "Market, Culture, and Authority: A Comparative Analysis of Management and Organization in the Far East" (*AJS* 94, suppl. [July 1988]: S52-S94), Gary Hamilton and Nicole Biggart propose models of state/business relationships in South Korea, Taiwan, and Japan: South Korea's "strong state model," in which the state intervenes heavily in the economy; Taiwan's "strong society model," in which the state refrains from such action; and Japan's "strong intermediate power model," in which the state promotes public-private cooperation. The authors also maintain that each model is derived from a unique strategy of political legitimization.

In this comment, I question the validity of the "strong society model" in Taiwan.¹ I shall argue first that Taiwan's Nationalist state intervenes in the economy as strongly as the South Korean state and, second, that

¹ Because of lack of space, this commentary addresses only the issue of state-business relationships, although Hamilton and Biggart also examine the internal structure of business networks. The latter problem is discussed more fully in Hamilton, Orrù, and Biggart (1987) and in Lee et al. (1987), the latter of which includes my critical comments on Hamilton and others' conception of Taiwan business groups.

Permission to reprint a comment printed in this section may be obtained only from the author.

policy choice is better explained by internal and external power structures than by legitimating ideology.

State and Society in Taiwan and South Korea

Hamilton and Biggart base their "strong society/strong state" contrast on the following grounds: (1) "unlike this sector in South Korea, public enterprises in Taiwan have steadily decreased in importance"; (2) in Taiwan, "incentives for export . . . have not favored industrial concentration, as has occurred in South Korea"; (3) "as in . . . South Korea, the state in Taiwan exerts strong controls over the financial system. . . . Unlike . . . South Korea's, however, [Taiwan's] financial system favored the development of a curb market"; and (4) "like the South Korean state, Taiwan's government develops economic plans, but unlike South Korea there are no implementation procedures" (p. S79). These observations are empirically unfounded.

First, the public sector is larger in Taiwan than in South Korea. "In 1976 public enterprises accounted for 22 percent of Taiwan's gross domestic product but for only 9 percent in Korea" (Johnson 1987, p. 149). This has not changed in the 1980s. In 1984 the combined sales of Taiwan's 27 state-owned enterprises amounted to about one-third of the gross national product (GNP) (Lin 1985, p. 113). If public enterprises owned by the provincial government and those in which the state or state-owned firms have minority shares are added, the magnitude of Taiwan's public sector would be greater. By contrast, South Korea's 25 state-owned and 75 state-invested enterprises produced about 10% of the GNP in 1986 (Lee 1987, p. 17). Moreover, privatization is more advanced in South Korea than in Taiwan. In South Korea, three large, profitable corporations have been transferred to big business groups called *chaebol* since the late 1960s: Korean Express to Dong-A Group, Korean Air to Hanjin Group, and a petroleum refinery to Sunkyong Group (Lee 1987, p. 16). Also, denationalization of four city banks in 1981-83 allowed *chaebol* owners to become leading stockholders in these banks; as of March 1984, Samsung Group owns 15.97% of Commercial Bank of Korea and 8.3% of Choheung Bank, Daewoo Group 24.8% of Korea First Bank, and Hyundai Group 11.93% of Bank of Seoul and Trust (He 1985, p. 30). In Taiwan, however, no public enterprise has been handed over to private business since four state-owned firms were privatized as part of the land reform in 1954.² In addition, in 1987 South Korea announced

² After the Nationalist government lost its seat in the United Nations in 1971, the state-owned Bank of China was privatized as the International Commercial Bank of China (ICBC) in order to protect some 20 foreign branches of the bank from potential

a program for complete or partial privatization of 17 more public enterprises (Lee 1987). The Taiwanese government as of March 1989 has no comparable plan.

Second, industrial concentration has occurred in Taiwan, and it was achieved by the state. Take the plastics industry as an example. True, most downstream producers such as toy makers are small- to middle-scale firms. But, upstream producers are dominated by state-owned and party-affiliated corporations: production of naphtha, the basic material for the entire industry, is monopolized by state-owned China Petroleum Corporation (Taniura 1988, p. 278); a firm partly owned by the Nationalist party (KMT) produces 47% of Taiwan's supply of polypropylene (McGregor 1988). In the textile industry, China Petrochemical Development Corporation, a state-owned company, and China American Petrochemical Corporation, a joint venture between China Petroleum, KMT's investment firm, and AMOCO, are the sole producers of materials for synthetic fibers (Sato 1988, p. 237). In the steel industry, state-owned China Steel Corporation is 33 times larger in assets than the biggest private steelmaker (*Tianxia zashi* 1988, pp. 112–15). In short, the state and the party own and operate an industrial complex that monopolistically controls key upstream industries, thereby blocking private business groups from achieving vertical integration.

Third, the curb market is as important in South Korea as in Taiwan. Supported by *kye*, a traditional rotating credit system, a complex unofficial money market has emerged in South Korea (Cole and Park 1983). A government study estimated the amount of loans extended through the curb market at 1.1 trillion won, or about 7% of total bank loans in 1981, but the received view puts the figure at 5–6 trillion won, or 35% of total bank loans (Manabe 1987, pp. 123–25). A series of financial scandals in 1982–83 revealed that large corporations were also involved in the curb market (Shim 1982, 1983; Child 1983). Moreover, “one banking source estimated that even Korea's biggest firms rely on the curb market for as much as 20% of their total operating funds” (Nakarmi 1984, p. 13). As for Taiwan, the amount of “black market loans” is estimated at 193 billion Taiwanese dollars (NT\$) in 1981 (Peng and Zheng 1985, p. 166), which corresponds to 17% of total bank loans. Accurate comparison is impossible, but the curb market seems no less important in South Korea than in Taiwan.

Finally, Taiwan's government does possess several means to imple-

takeover by the government of the People's Republic. The state still appoints ICBC's management, and the Nationalist party's investment firm owns nearly half of the bank's shares (Song 1988, p. 138); hence, I do not regard this as a case of denationalization.

ment its economic policies and uses them when necessary. It can intervene in the economy through public enterprises by manipulating the prices of basic materials and energy as it did during the two oil crises (Nishimura 1982, pp. 110–12). And Taiwan's planning agencies, "indicative rather than commandist, did have teeth" (Gold 1986, p. 87). Recently, some "teeth" were used in the establishment in 1986 of Taiwan Semiconductor Manufacturing Corporation, a much-heralded high-tech joint venture among the state, domestic investors, and foreign capital. A letter cosigned by five ministers and a visit by K. T. Li, a doyen of Taiwan's developmental technocrats, reportedly forced Formosa Plastics Group's Y. C. Wang to "reconsider" his earlier decision not to join the new government-initiated project (Chen 1986, pp. 168–69). On the other hand, in South Korea, state intervention is not limitless: "the largest business groups are now so big that, though the government still has the power to pull the financial rug from under their feet, it dare not risk doing so" (Ensor 1985, p. 75).

The above discussion shows that the state of Taiwan is just as "strong" as the South Korean state vis-à-vis business and that South Korean society shares such features of a "strong society" as the curb market. I therefore conclude that the "strong society model" as conceived by Hamilton and Biggart does not adequately represent the state/business relationship in postwar Taiwan.

Policy Choice in Taiwan and South Korea

The governments of Taiwan and South Korea, then, do not differ much in the degree of intervention. Rather, they differ in the direction of intervention: while in South Korea the state extends preferential loans to large *chaebol*, in Taiwan most government loans "go to state-owned enterprises rather than to big business" (Johnson 1987, p. 149); petroleum and petrochemical industries are in the hands of major *chaebol* in South Korea, whereas they are under government monopoly in Taiwan. In short, the South Korean state has supported and nurtured large private business groups, but the Taiwanese state has not. Why? The alleged Confucian legitimation strategy of the Nationalist regime cannot be the reason since according to Hamilton and Biggart it should have restrained the state from any form of intervention.³ The answer lies, in my opinion,

³ This interpretation is difficult to accept also in light of the Singaporean case. Under premier Lee Kuang Yew, the state's economic intervention is stronger than in Taiwan or South Korea. Squeezed by the state and multinationals, small and medium firms in Singapore account for just 10% of domestic sales of manufactured goods and for merely 5% of export (Tu 1988, p. 182); small-scale Chinese family firms do not flourish

in the marked difference in the domestic and international power relations around the governments of Taiwan and South Korea.

In Taiwan, there is a deep divide between Mainlanders and the Taiwanese. After the bloody conflict with the island's residents and their violent subjugation in 1947 ("the February 28 incident"), the émigré regime was never able to form harmonious relations with its new subjects. Persistence of Taiwan independence movements and the new oppositionists' demand for self-determination by the island residents attest to the cleavage between the two ethnic groups. Internationally, the Nationalist regime faces increasing political isolation. Under such circumstances, the outsider elite is reluctant to part with public enterprise, the economic base of their power.

Conditions are quite different in South Korea. At home, no ethnic conflict exists between the state and private business. Rather, there is regional unity between the political and business elites; both Park Chung Hee and Chun Doo Hwan derived cliental support mostly from Kyonggi Province, which includes Seoul, and Kyongsang Province (Jacobs 1985, p. 151), the very regions from which many *chaebol* leaders originated (Hattori 1985, p. 250).⁴ Abroad, the South Korean state enjoys the unanimous support of major capitalist powers. One good example is the organization called IECOK, founded in 1965 and consisting of 10 Organization for Economic Cooperation and Development (OECD) nations, the World Bank, the International Monetary Fund, International Finance Corporation, and the OECD and Asian Development Bank. It coordinates foreign loans and caters to the needs of South Korea (Nishimura 1982, p. 35). These conditions underlie the South Korean state's willingness and ability to support *chaebol*.

To repeat, the Taiwanese state is isolated both internally and externally, whereas the South Korean state has networks of both domestic and international support. This difference in the configuration of power relations, in my opinion, better explains the difference in the two governments' policy choices.

ICHIRO NUMAZAKI

Michigan State University

under a self-proclaimed Confucian ruler. Does this mean that there is yet another version of Confucianism?

⁴ Regional schism does exist in South Korea; e.g., between underdeveloped South Cholla province and wealthier Kyongsang. But, South Korea's power elite, political and economic, share a common regional background and regionally based interests to a greater extent than Taiwan's counterpart does.

REFERENCES

- Chen, Junrong. 1986. "Baiyi yuan VLSI jihua weihe yi bo san zhe" (Why problem after problem in the NS\$10 billion VLSI project?). *Caixun* 52:166-69.
- Child, Reginald. 1983. "School for Scandal." *Far Eastern Economic Review*, October 20, pp. 77-79.
- Cole, David C., and Yung C. Park. 1983. *Financial Development in Korea, 1945-1978*. Cambridge, Mass.: Harvard University Press.
- Ensor, Paul. 1985. "Everything Is Relative in the World of the Chaebol." *Far Eastern Economic Review*, December 12, pp. 74-75.
- Gold, Thomas B. 1986. *State and Society in the Taiwan Miracle*. Armonk, N.Y.: Sharpe.
- Hamilton, Gary G., Marco Orrú, and Nicole W. Biggart. 1987. "Enterprise Groups in East Asia: An Organizational Analysis." *Shoken keizai* 161:78-106.
- Hattori, Tamio. 1985. "Seiji-keizai" (Politics and economy). Pp. 233-60 in *Motto shiritai kankoku* (To know more about South Korea), edited by Abito Ito. Tokyo: Kobundo.
- He, Hwa. 1985. "Kankoku zaibatsu no kabushiki shoyu to shihai kozo" (The structure of ownership and control of Korean chaebol). *Inbesutomento* 230:19-31.
- Jacobs, Norman. 1985. *The Korean Road to Modernization and Development*. Urbana and Chicago: University of Illinois Press.
- Johnson, Chalmers. 1987. "Political Institutions and Economic Performance. The Government-Business Relationships in Japan, South Korea, and Taiwan." Pp. 136-64 in *The Political Economy of New Asian Industrialism*, edited by Frederic C. Deyo. Ithaca, N.Y., and London: Cornell University Press.
- Lee, Byung-Jong. 1987. "A Big Step toward Lesser Government." *Business Korea* 5, no. 1 (July):16-17.
- Lee, Hahn-Koo, Ichiro Numazaki, and Yoshiaki Ueda. 1987. "Comments on 'Enterprise Groups in East Asia' by Hamilton, Orrú and Biggart." *Shoken keizai* 162:10-29.
- Lin, Mingcong. 1985. "Shi'er jia guoyingshiye shei de biaoxian zuihao" (Among the 12 National enterprises, whose performance is the best?). *Caixun* 42:107-25.
- Manabe, Yoichi. 1987. "Kankoku no chika keizai" (South Korea's underground economy). Pp. 120-51 in *Sakai no chika keizai* (Underground economies of the world), edited by Takatsugu Nato. Tokyo: Dobunkan.
- McGregor, James. 1988. "KMT Inc.'s Taipei Ties Come under Fire." *Asian Wall Street Journal*, July 7, pp. 1,5.
- Nakarmi, Laxmi. 1984. "Skidding to the Curb Market." *Business Korea* 1, no. 8 (February): 13-14.
- Nishimura, Toshio. 1982. *Kankoku ni chosenshita taiwan* (Taiwan, a challenger to South Korea). Tokyo: Kokusai keizai sha.
- Peng, Bairian, and Suqing Zheng. 1985. "Taiwan minjian jinrong de xijin quandao" (Taiwan's private financial money market). *Taiwan yinghang jikan* 36 (3):165-205.
- Sato, Yukihito. 1988. "Sen'i sangyo" (The textile industry). Pp. 230-46 in *Taiwan no kogyoka* (Industrialization of Taiwan), edited by Takao Taniguchi. Tokyo: Ajia keizai kenkyusho.
- Shim, Jae Hoon. 1982. "A Queen's Ransom." *Far Eastern Economic Review*, May 21, pp. 50-54.
- . 1983. "Gutter Side of the Kerb." *Far Eastern Economic Review*, September 8, pp. 56-58.
- Song, Huanong. 1988. "Guomindang jinrong shiye daguan" (The Nationalist party's array of financial enterprises). *Caixun* 74:137-39.
- Taniura, Takao. 1988. "Purasuchikku sangyo" (The plastics industry). Pp. 273-88.

- in *Taiwan no kogyoka* (Industrialization of Taiwan), edited by Takao Tanura. Tokyo: Ajia keizai kenkyusho.
- Tianxia zazhi*. 1988. "Tianxia 1000 daqiyue" (The 1,000 largest industrial corporations). *Tianxia zazhi* 86:67-160.
- Tu, Zhaoyan. 1988. *Nihkusu* (NICs). Tokyo: Kodansha.

THE ORGANIZATION OF BUSINESS IN TAIWAN: REPLY TO NUMAZAKI¹

Ichiro Numazaki's comment on our article on the organization of business in Japan, South Korea, and Taiwan is insightful and highlights a key point in our argument, namely the nature of state/business relations in Taiwan and South Korea. Numazaki concludes that "the Taiwanese state is just as 'strong' as the South Korean state vis-à-vis business," that South Korean society shares with Taiwan some features of a "strong society," especially in regard to curb-market financing, and that "the 'strong society model' . . . does not adequately represent the state/business relationship in postwar Taiwan." Attempting to discredit our thesis, Numazaki then outlines some differences in the configuration of domestic and international power relations that supposedly better explain the differences in governmental policy between the two countries.

Numazaki's comment is very important, not because it is correct, for it is not, but rather because it identifies a critical issue in the analysis of developing societies, particularly those in Asia. Numazaki follows the lead of many other scholars in arguing that such differences as may exist among East Asian states are unimportant when it comes to explaining Asian business success. They are all strong states, what Chalmers Johnson (1987) and Bruce Cummings (1984) call "bureaucratic, authoritarian" states, and it is precisely this kind of state that creates the conditions for rapid Asian economic development.²

Our thesis substantially differs from this line of reasoning. In this rejoinder to Numazaki, we present the reasons that this conventional depiction of the state is unsatisfactory for our purposes and then reply point by point to Numazaki's critique of our characterization of the Taiwanese state.

Economic Organization

Numazaki appears to have misunderstood the main thesis of our article. It was our purpose to explain the organizational patterns of Asian busi-

¹ We wish to acknowledge William Zelle's research assistance and comments on the first draft of this reply.

² In regard to Taiwan, Thomas Gold (1986) is the one who makes the strongest argument. Also see Alice H. Amsden (1985).

ness—the differing network configurations of firms—not the policy choices of relative effectiveness of East Asian states in promoting economic success. This distinction between organizational structure and states' roles in spurring economic growth is neither obscure nor insignificant. In social science terms, the organizational structure of East Asian economies is our dependent variable; it is a *configurational* variable, reducible to neither a growth rate nor policy choice typology. Therefore, as a first step in our article, we demonstrate the differences in economic organization, “particularly in the export sectors” (p. S56), between the three countries, and in the rest of the article we evaluate alternative perspectives that could be used to explain these configurational differences. We demonstrate that very large business groups in South Korea (the *chaebol*) dominate the export sector, whereas in Taiwan, this sector is dominated by small- and medium-sized firms, even though some of these firms are parts of family-run business groups. Our analysis of these differences in this article was preliminary, but subsequent analysis reveals that the configurational differences are even larger and more significant than we originally stated (Orrú, Hamilton, and Suzuki 1989; Orrú, Biggart, and Hamilton, in press; Hamilton, Zeile, and Kim 1990).

In his comment, however, Numazaki did not acknowledge our dependent variable, thus missing the main thrust of our argument. Rather, he takes issue with the independent variable, a political economy variable, that we select as the best explanation for the differences. We argue that, on the one hand, the South Korean state actively sponsored the extraordinary growth of selected business groups in selected industries by means of planning, policy, and implementing procedures. We characterize this relationship between state and business as being that of a “strong state.” On the other hand, we argue that the spread of small- and medium-sized business throughout Taiwan's export sector could not be explained by the planning, policy, and implementation procedures of the Taiwanese state. Instead, widespread entrepreneurship in Taiwan was better explained by social institutions common to Chinese societies that flourished in the absence of state enforcement. We characterize this state/business relationship as being that of a “strong society,” in which there emerged a “separation of spheres” between public and private sectors of the economy. Here, the export sector is almost entirely controlled by private firms. We should note that we strongly emphasized that “the state in Taiwan is by no means weak,” but rather it promotes free enterprise in the export sector (S78–S79).

Because he ignored our dependent variable, Numazaki misconstrues our explanation. He maintains that there are no important differences between South Korea and Taiwan in the strength of either state or society. In essence, he argues that in Taiwan the state is strong, period.

Therefore, state/business relations must also be characterized by a strong state presence, whatever the practices or organizational configuration of business. This is the same kind of reasoning that other scholars have used to argue that strong states are needed for economic development. State structures become black boxes, economic organization slips into theoretical insignificance, and rates of growth serve as the only important focus for explanation.

The Social Sources of Taiwan's Economic Organization

Keeping the dependent variable in mind, we now look at the four empirical points of critique that Numazaki raises. First, he notes that "the public sector is larger in Taiwan than in South Korea" (p. 994). The relative size of the state sector was not mentioned in our article because it is the role of the state and not the size of public sector that we thought important. Our argument is that the South Korean state, thinking that only large businesses could compete in the world market, wanted Korean businesses to be very large indeed, so Numazaki's point here agrees with ours. Particularly in the 1960s and 1970s, the South Korean government turned over many of its public enterprises to *chaebol* control, which made large business groups even larger. In some instances, for example POSCO Steel, the state created businesses whose equity shares were publicly available. These "privatized" businesses remain more accountable to state planners than do the *chaebol*.

In Taiwan, however, the state played a very different role in the economy. The state seldom sponsors big businesses in the export sector, but, as Numazaki noted, the state controls many upstream, largely import-substitution industries, most of which require large economies of scale and on which small- and medium-sized businesses in the export sectors depend. We stated this fact in our article (p. S79) and used it to characterize state/business relations as based on a "separation of spheres" (p. S86). The state's continuing monopolization of such industries as steel, petroleum, and electrical power prevents the growth of huge private business, as occurred in South Korea, and provides a stable infrastructure for small business.³ In other words, Numazaki's first point does not undermine but rather supports our explanation.⁴

³ Indeed, the eminent economist Tibor Scitovsky (1985, p. 223) points to the domination of these basic industries by public enterprises as one factor that makes Taiwan a country "whose conditions of competition and the proper functioning of markets are better fulfilled than in most other private enterprise economies."

⁴ Nonetheless, it is important to point out that, while Taiwan's public enterprise sector is larger than Korea's, as a share of manufacturing value added, Taiwan's public manufacturing enterprises have decreased in relative importance (from 40.6%

Numazaki's second point builds on his first, but this point greatly distorts what is actually occurring. In Taiwan, Numazaki says, "industrial concentration . . . was achieved by the state." Although the state does monopolize some of the main import-substitution sectors, Taiwan's huge economic growth has occurred in the export-manufacturing sectors; these are the focus of our article and, when compared with export-manufacturing sectors in South Korea and Japan, notably lack significant levels of firm concentration. Elsewhere, we (Hamilton, Zeile, and Kim 1990) have provided a comprehensive breakdown of these concentration figures. These figures show that the concentration that does occur in the private sector typically occurs in upstream production as well. It is true that the state and the party own a lot in Taiwan, but that does not undermine our point that the organizational patterning of Taiwan's economic growth is dominated by small- and medium-sized businesses and that this pattern is accelerating, whereas in South Korea the reverse process is happening.⁵

Numazaki's third point is equally misleading. Forgetting that we are trying to explain differences between organizational configurations, Numazaki announces that "the curb market is no less important in South Korea than in Taiwan" and gives as proof evidence that "even Korea's biggest firms rely on the curb market for . . . funds." We argued that the state in Taiwan, like the South Korean state, exerts strong controls over the financial system but that, unlike that of South Korea, Taiwan's financial system favored the development of a curb market. Numazaki presents some comparative figures on the percentage of loans extended through the curb market. He states that in South Korea even large corporations rely on the curb market for much of their financing needs. This is not consistent with figures we have seen for 1970s. Youngil Lim (1981, table 10) presents figures (calculated from flow-of-funds data) on the percentage distribution of sources of funds for all Korean corporations. These figures indicate that, in the period 1968-77, the percentage of corporate funds originating from the curb market was consistently less than 5%. In fact, for some years the figures for curb-market loans are negative, indicating that Korean corporations were net creditors, not borrowers, in the curb market. Large corporations in South Korea may have had to rely more on the curb market for short-term financing needs

of the total in 1963 to 10.2% in 1987), even if privatization has not occurred as in South Korea (Council for Economic Planning and Development 1988).

⁵ Calculations made by Tyler S. Biggs (1988, pp. 3-4) make this point very clear. In Taiwan between 1966 and 1986, "the number of reported firms increased by 315% . . . and the average firm size expanded 15%." At the same time in South Korea, "the average firm size jumped by 300% and its firms grew in number by only 10%."

in 1980 (when South Korea was hit by a severe recession) and in 1984 (when the government froze the share of bank loans directed to the top 30 *chaebol*), but these years are hardly typical of the overall historical pattern of Korean corporate finance. Lim (1981, table 12) also presents 1977 figures showing that the degree of dependence of manufacturing enterprises on the curb market is inversely related to establishment size: for establishments employing more than 200 employees, curb-market debt accounts for less than 3% of total liabilities.

The curb market in Taiwan serves all firms, not just the big ones, and particularly serves small- and medium-sized firms. Tyler Biggs (1988, pp. 26–29) estimates that capital investment in Taiwan between 1965 and 1984 came from two main sources: 45%–55% from accumulated profits that are reinvested and about 30% from the curb market, that is, from family, friends, and acquaintances. In other words, from 75% to 85% of Taiwan's capital investment in the past two decades came from nongovernmental, nonforeign sources, which is in direct contrast to the heavily leveraged, large South Korean firms, which have borrowed liberally from government, government-controlled banks, and government-approved foreign sources since beginning their rapid growth in the early 1960s. This financial and political leverage, expressed as debt/equity ratios *three times Taiwan's* in the manufacturing sector,⁶ gave the state virtually hegemonic control over the *chaebol* until the early 1980s. The curb market in Taiwan provides evidence for a "strong society" that takes care of its own financial needs, whereas in South Korea use of curb markets is better seen as attempted independence from state control by an industrial elite and, more recently, the drying up of favors by a politically troubled state.

Numazaki's fourth point is equally insensitive to the organizational differences that separate South Korea and Taiwan. He maintains that the Taiwanese government does "possess several means to implement its economic policies and uses them when necessary" (pp. 995–96). We certainly agree with this point and acknowledge this fact in our article (p. S79), but what we maintain is that these government measures have encouraged industrialization without industrial concentration. We could now, in fact, make our case much stronger because in recent years government attempts to increase the size of firms in some sectors seem to have failed. It tried to create large trading companies on the basis of the Japanese model, but these have been unsuccessful (Fields 1988). It supported the formation of integrated subcontracting systems, again

⁶ The average debt/equity ratios for manufacturing enterprises for 1972–85 were 362.7% for South Korea and 162% for Taiwan (Zeile 1989). In 1985, the figures were 348.4% and 113.6%, respectively.

modeled on the Japanese, but these have also failed (Lorch and Biggs 1989). The state also started special banks to increase the size of small- and medium-sized firms through special financing, but the results have been disappointing because businessmen do not want to take loans from state sources. Finally, the state has tried to sponsor the transportation industry so that Taiwan could begin exporting automobiles and trucks, but to date Taiwan, the country that leads the world in the ratio of manufactured exports to total output, has yet to export a car. All this indicates, as we said in our article, that state policy does not lead to accomplished fact, as it has so often in South Korea. The Taiwanese state has to contend with and ultimately to accept the established commercial patterns and economic momentum that exist within the private sector, that is, the "strong society."

Political Legitimation and Class Alignments

The governments of Taiwan and South Korea differ dramatically in their approaches to business. That does not make the Taiwanese state weak but rather merely makes it different from Korea. Even small differences in actual state structure turn out to have large consequences, however, because political institutions, like economic institutions, are embedded in society, and societies differ. Even mythically identical states with identical economic policies could not expect the same organizational outcome, given differently constructed social orders. Nonetheless, we believe the role of the state to be crucial in the societies we examined.

We emphasized the legitimation strategies of the political regimes because inherent in them is an attempt, not always successful, to satisfy, control, or repress powerful political constituencies, often crucial factors in the cases at hand. It is our point that government/business relationships are not separate from the overall and much more complex task of justifying and maintaining a regime's right to rule. Numazaki, who misses this point, wants us to emphasize "the configuration of power relations" (p. 997) in the two societies. We could not agree more, and we believe that, by examining the strategy of political legitimation in these countries, we are also recognizing the paramount importance of class alignments in shaping the patterns of Asian capitalism.

Numazaki's analysis suggests both the strengths and weaknesses of a political economy argument.⁷ Political economists correctly draw our attention to the role of the state in development and to the structure of powerful groups in a society. But political economy theories err when they describe the state as a *necessarily* causal factor in determining social

⁷ For an additional theoretical statement along this line, see Biggart (1989).

and economic outcomes. This kind of reasoning assumes that which should be the object of investigation and reduces people to class agents who play the roles assigned to them by history. Moreover, a political economy argument, while useful in explaining the fact of development, is poorly suited to explaining the patterns of organization through which a society develops. It is a perspective that conceptualizes only crudely the link between political structure and economic action. Far better, we believe, is an institutional argument that allows for not only the role of the state but also the role of actors who creatively construct their worlds with the repertoire of patterns that are their historical legacy.⁸

GARY G. HAMILTON AND NICOLE WOOLSEY BIGGART

University of California, Davis

REFERENCES

- Amaden, Alice H. 1985. "The State and Taiwan's Economic Development." Pp. 78-106 in *Bringing the State Back In*, edited by Peter B. Evans, Dietrich Rueschemeyer, and Theda Skocpol. Cambridge: Cambridge University Press.
- Biggart, Nicole Woolsey. 1989. "Institutional Logic and Economic Explanation." Paper presented at the annual meeting of the American Sociological Association, San Francisco.
- . 1990. "Institutionalized Patrimonialism in Korean Business." *Comparative Social Research* 12:113-33.
- Biggs, Tyler S. 1988. "Financing the Emergence of Small and Medium Enterprise in Taiwan: Financial Mobilization and Flow of Domestic Credit to the Private Sector." Employment and Enterprise Policy Analysis, Discussion Paper no. 15. U.S. Agency for International Development, Washington, D.C.
- Council for Economic Planning and Development. 1988. *Taiwan Statistical Data Book, 1988*. Taipei: Council for Economic Planning and Development.
- Cummings, Bruce. 1984. "The Origins and Development of the Northeast Asian Political Economy: Industrial Sectors, Product Cycles, and Political Consequences." *International Organizations* 38:1-40.
- Fields, Karl J. 1988. "Industrial Policy and Industrial Organization: The Case of Taiwan's Large Trading Companies." Paper presented at meetings of the American Association for Chinese Studies, Stanford, Calif.
- Gold, Thomas B. 1986. *State and Society in the Taiwan Miracle*. New York: Sharpe.
- Hamilton, Gary G., and Kao Cheng-shu. 1990. "The Institutional Foundations of Chinese Business: The Taiwan Family Firm." *Comparative Social Research* 12:95-112.
- Hamilton, Gary G., William Zelle, and Wan-Jin Kim. 1990. "The Network Structures of East Asian Economies." Pp. 105-29 in *Capitalism in Contrasting Cultures*, edited by S. R. Clegg and S. G. Redding. Berlin: de Gruyter.
- Johnson, Chalmers. 1987. "Political Institutions and Economic Performance: Business Relationships in Japan, South Korea, and Taiwan." Pp. 136-64 in *The Politic-*

⁸ We have each further developed this idea by examining the historical bases for modern industrial patterns in Asia (Hamilton and Kao 1990; Biggart 1990).

- cal Economy of the New Asian Industrialism*, edited by Frederic C. Deyo. Ithaca, N.Y.: Cornell University Press.
- Lim, Youngil. 1981. *Government Policy and Private Enterprise: Korean Experience in Industrialisation*. Berkeley, Calif.: Institute of East Asian Studies.
- Lorch, Klaus, and Tyler Biggs. 1989. "Growing in the Interstices. The Limits of Government Promotion of Small Industries." Paper presented at the annual meeting of the Association for Asian Studies, Washington, D.C.
- Orrú, Marco, Nicole Woolsey Biggart, and Gary G. Hamilton. In press. "Organizational Isomorphism in East Asia: Broadening the New Institutionalism." In *The New Institutionalism in Organizational Analysis*, edited by Walter W. Powell and Paul J. DiMaggio. Chicago: University of Chicago Press.
- Orrú, Marco, Gary G. Hamilton, and Mariko Suzuki. 1989. "Patterns of Interfirm Control in Japanese Business." *Organizational Studies* 10:549-74.
- Scitovsky, Tibor. 1985. "Economic Development in Taiwan and South Korea: 1965-81." *Food Research Institute Studies* 19 (1985): 215-64.
- Zeile, William. 1989. "Credit-Rationing as an Instrument of Industrial Targeting. The Korean Experience in the 1970s." East Asia Business and Development Working Paper no. 30. University of California, Davis, Institute of Governmental Affairs.

Review Essay: Individualism Askew

Foundations of Social Theory. By James S. Coleman. Cambridge, Mass.: Belknap Press of Harvard University Press, 1990. Pp. xvi + 993. \$39.50.

Charles Tilly
New School for Social Research

James Coleman has built up a great rock pile of a book, proposing that the rest of us use it as a foundation for the reconstruction of social science. The reconstruction will, he claims, enable us not only to understand and explain existing social life, but also to evaluate and design new social institutions. A prospector with pick, shovel, slide rule, divining wand, and sturdy boots—the trek, after all, takes almost a thousand dense pages, much of it through mathematical thickets—can find many a precious stone but will have trouble remembering the whole mountain's contours. Seeking to “provide a foundation for the purposive reconstruction of society” (p. 652), Coleman has taken a rational-action framework and bent it from its individualistic origins toward a serious consideration of social relations. He has not, however, bent it far enough fast enough. As a result, the book repeatedly subverts its own goals, vitiating victories where it should be consolidating them.

Foundations elaborates and refines the approach Coleman took in *The Mathematics of Collective Action* (London: Heinemann, 1973) and related works. It centers on the analysis of collective choice, gaining plausibility and effectiveness to the extent that a social phenomenon can reasonably be treated as a matter of interest-oriented choice by distinctly individualistic actors, losing them to the extent that it cannot. It echoes his earlier worries about the shift from “primordial” to “purposive” social organization, from individual to corporate actors, with its destruction of the social ties that reinforce people's capacity for collective solutions to the negative externalities produced by self-interested behavior. To his great credit, Coleman resolutely rejects the theoretical strategies most often adopted by sociological imperialists from Auguste Comte onward: these strategies include assuming the existence of a “society” or some other encompassing social system, attributing some immanent direction of change to the system, assigning people to predetermined positions within that system, explaining their behavior in terms of the system's needs and logic, and placing substantial control over individual behavior in the system itself rather than in the actions of other, specific individuals.

Coleman also repudiates the related parasitical strategy of latching on to Max Weber or another presumably great thinker, identifying difficulties in the great thinker's formulations, proposing solutions to those difficulties, then assuming that the result of incorporating those solutions must be an improved, consistent theoretical system; none of that *Repairing Weber*, *Ameliorating Marx*, or *Improving Parsons* for him. Coleman opts for as thoroughgoing a methodological individualism as he can manage, works out its implications step by step by step by step, and takes full responsibility for the results of all the trudging. More so than in his previous major works, he draws on economic theories of agency to specify conditions under which people cede control over their own actions, for a consideration, to sets of others, thus creating norms and authority. On the way, he begins to sketch theories of collective behavior, of revolution, of the self, and even of internalization. He does not, however, take the leap toward which his more decisive small steps seem to be leading: abandoning the individualism for an analysis in which durable social relations form the starting point, rather than merely the means, of solving individually defined problems. Nor does he provide any useful theories of the production or transformation of resources, interests, and events, for all the importance those entities hold in his arguments. He builds a very static system.

An actor who has finite but highly fungible resources, Coleman postulates, has varying interests in the outcomes of a number of events over which he has different degrees of control; accordingly, this actor expends resources differentially to influence the outcomes in question. Other actors are playing the same games with respect to at least some of the same events, which means that pairs of actors sometimes compete and sometimes collaborate but normally have to take each other into account. Coleman pushes analogies to neoclassical accounts of economic behavior—interests given a priori, maximization of utilities, full information, and so on—as far as he can before invoking social structure. He constructs, for instance, an intriguing analysis of trust (chap. 5) on the basis of simple relationships between a person's expected gains and expected losses from another person; a confidence man, in this analysis, offers large expected gains compared to possible losses.

More often than not, Coleman provides a radically stylized presentation of his reasoning by applying it rigorously to the situation of two boys (Tom and John, with the occasional intervention of a third youth, Steve) trading baseball and football cards, then moves on to more interesting and complicated social applications. A reader of Canadian humor inevitably thinks of Stephen Leacock's tales of A, B, and C, the hapless characters whose disorderly and sometimes tragic lives algebra books insisted on rendering as strictly logical.

Even the applications are greatly simplified. A typical Colemanian analysis (pp. 126, 737) concerns a contemporary political system, reduced to four sets of actors: legislative candidates, voters, interest groups, and television networks. "Voters," says Coleman, "have interests in enter-

tainment, money, and the promises of candidates (their appeal) and have two resources, their attention and their vote. Interest groups have a single resource, money, and an interest in the legislative attention of successful candidates and, to a lesser extent, an interest in the promises of candidates. Television networks have a single resource, entertainment, and single interest, money" (p. 737). The analysis, then, consists of mapping the exchanges that are likely to occur among the actors: entertainment from TV for the attention of voters, money from interest groups for access to legislative candidates, and so forth. The resources involved are incompletely convertible; the model's legislative candidates do not, for example, exchange promises for entertainment. (As Coleman formalizes it, the model represents awkwardly the intersections of resources, such as the combinations of voters' attention and appropriate promises that candidates must fashion to attract votes; as he admits, the model assumes that resources operate independently of each other except for their rates of exchange.) Social structure enters this particular model chiefly as a set of constraints on who can exchange what with whom for what.

Coleman generally makes social structure as thin as possible; it consists of consensus among all actors about a limited number of expectations and evaluations, distributions of thresholds for individual participation in collective action, vesting of control over some of one's own actions in someone else, transaction costs due to the incompleteness of interpersonal networks, and so on. His greatest contribution, nevertheless, lies in introducing social relations into transactions that collective-choice analysts have customarily treated as entirely individualistic. He does so mainly at three points: where externalities give third parties significant interests in dyadic transactions, where disjoint interests exist (where, i.e., two parties to a transaction, such as an authority and a subordinate, share no interest in that transaction's outcome), and where serious obstacles (e.g., free riding) to beneficial collective action exist. In such cases, Coleman presents social structure as a problem-solving invention that people accept because it serves their interests. Most important, the invention of corporate actors—voluntary associations, states, firms, and so on—solves pressing problems of joint action but eventually poses acute problems of its own creation: problems of responsibility, problems of control.

Here both Coleman and his patient readers face a serious difficulty. Although Coleman offers a number of interesting suggestions as to the circumstances under which people invent norms and binding social relations, his extensive mathematical formalizations do not contain an account of either the process producing the relevant innovations or the incentives for producing them. Instead of stopping short at the start of each cul-de-sac, regrettably, he insists on working through them and dragging the frustrated reader with him. He reasonably asks, for example, when and why people who have only inalienable goods such as attention, love, and respect to offer actually establish effective changes. But his formalization does not represent directly the accumulated "social

capital"—previously established social relations providing shared understandings, guarantees of long-term reciprocity, and related benefits—that his verbal statements emphasize. The formulations, being based on neo-classical economics, are much more aggressively individualistic than the verbal summaries from which they proceed. Coleman eventually says as much. His saying so, however, provides little compensation for working through a long, dense discussion of which the outcome is, "No clear-cut answers as to what rational actors will do in such circumstances have been found by applying the theory" (p. 746). The experience of reading many such inconclusive explorations eventually reduces the incentive to read the next one with care.

Coleman's people live in a refreshingly benign world. Their social life includes no exploitation or coercion in the usual senses of these words, since his people take every action—including submission to slavery—voluntarily and to their own advantage. Coleman escapes from the problem of apparently involuntary servitude (at least among the Greeks and Romans; see p. 88), for example, by treating it as better than the death that otherwise threatened the vanquished. He neglects to say that the same people who enslaved also threatened death. Thus he ignores the threat of force that informs every protection racket, including enslavement, not to mention the force that holds the *children* of slaves in involuntary servitude. Similarly, he offers us a portrait of feudalism not as an outcome of conquest but as an arrangement in which "the prospective vassal saw himself as better off with this protection than without it" (p. 71). In European, Chinese, and Japanese experience, at least, armed coercion played so large a part in the construction and maintenance of feudal arrangements that the interpretation fundamentally distorts the entire system.

Coleman has inklings of the difficulty. Immediately after laying out his analysis of feudalism, he recognizes a class of involuntary authority that, "when exercised effectively in directions partially in accord with a subordinate's interests, comes to be accepted by the subordinate as legitimate. That there is such a phenomenon is widely recognized. The specific conditions under which it occurs are not well known" (pp. 71–72). Even there, he insists implausibly on the authority's partial service of the subordinate's interests. He makes no allowance for control that leaves room only for the foot-dragging, sabotage, mockery, and flight James Scott calls "weapons of the weak." Such reasoning serves Coleman in the short run because it justifies the use of analytic matrices involving voluntary, interest-oriented action. In the long run, however, it disserves him by ruling out the processes by which powerful actors narrow the choices available to other actors, sometimes to the point at which only two alternatives remain: conformity or death. At that point, theoretical convenience suppresses good sense.

Elsewhere, Coleman recognizes that force plays a part in social relations and that it even makes possible situations in which the application of force makes someone lose not only relatively but absolutely. His strangely schematic account of state formation (pp. 344–56), for instance,

allows for the possibility that some actors are better off under anarchy than under the jurisdiction of an established state. It says nothing, on the other hand, about the very real possibility that men (I *mean* men, who have almost always dominated the warrior business) impose state power on others with clear intent to seize their resources. Indeed, the sheer absence of war from Coleman's analysis ("war" does not appear in the index) raises doubts about almost everything he says concerning the operation of states.

The scheme's a priori fixing of interests eventually cripples its ability to account for large-scale social change. Now and then Coleman offers a helpless shrug of recognition. But nowhere in his sprawling compendium does he sketch approaches to industrialization, capital accumulation, urbanization, class formation, population growth, cultural creativity, the alteration of kinship systems, the development of representative politics, the creation of world economic systems, or most of the other social transformations with which students of social change occupy themselves. His system makes no place for processes (such as education, differential fertility, economic exploitation, and taxation) that produce massive social change by tiny increments. The exceptions are revealing: Coleman touches on the formation of bureaucracies and of states, but as corporate actors' instant inventions that solve otherwise intractable problems rather than as continuous processes involving the imposition of power on unwilling subjects.

In erecting his megalith, Coleman nevertheless makes some clever decisions. He saves the mathematics for the book's last third. That dense, book-length section works as a series of appendixes to less technical earlier chapters rather than as a continuous argument. He repeatedly lists empirical implications of his arguments and thereby boldly invites verification or refutation instead of retreating into vagueness and abstraction. His analysis of child socialization (pp. 293-99), for example, leads to the conclusions that in cases in which children tend to leave home young, parents invest less in getting them to internalize norms, and that egalitarian parents emphasize internalization more than others; both counterintuitive hypotheses lend themselves handily to empirical verification.

After many earlier hints of an attack to come, late in the book (pp. 769-81.) Coleman directly challenges the economists' maxim barring the interpersonal comparison of utilities, a maxim that rules out any aggregation of interests and therefore condemns much of his (and other sociologists') efforts to futility. He replies by using the actual, behaviorally revealed power of different individuals within particular systems of social relations as weights for aggregation; utilities dissolve into the direct exercise of power. That the procedure eliminates comparison of different distributions of power, that it ties social analysis tightly to the present, that it contains no struggle, uncertainty, or continuous process, all confirm the sense of static conservatism that builds up during a journey through Coleman's long, tortuous, sociological reconstruction of rational collective choice.

Book Reviews

Scale and Scope: The Dynamics of Industrial Capitalism. By Alfred D. Chandler, Jr. Cambridge, Mass.: Harvard University Press, 1990. Pp. xvii + 860. \$35.00.

Neil Fligstein
University of Arizona

Alfred Chandler's newest historical study of large firms is his most ambitious to date. In *Scale and Scope*, he argues that there were three reasons for the success of corporations in the manufacturing industries in three countries from 1880 to 1940: the utilization of economies of scale and scope, the creation of sales and distribution systems to take advantage of efficient plants, and the use of professional managers to coordinate the firms. Chandler claims that, in spite of vastly different political and legal systems and different trajectories of economic development, the only path to success was the convergence around the large industrial enterprise. I urge anyone who is interested in the history of corporations and the comparative study of that institution to read this book. The encyclopedic histories of the corporations are worth the price of the book.

In spite of this praise, I would argue that Chandler's evidence undermines his central claims. For instance, Chandler shows that in the United States and Germany, the pattern of state regulation of competitive relations encouraged large firms to act in quite different ways. In the United States, the federal government's use of the antitrust laws forced U.S. firms to get big and establish oligopolies as the only legal method to control competition. In Germany, where interfirm cooperation was legal, firms tended to be smaller than U.S. firms, more likely to be members of cartels, more vertically integrated, less organized into clear divisional hierarchies that Chandler identifies as the rationalization of management, and much less likely to have engaged in mergers, diversification (i.e., scope), and the use of the multidivisional form. German managerial hierarchies were much flatter, and, as a result, managers were much more involved in day-to-day operations and rarely engaged in long-run strategic management. The decisive advantages of successful firms could therefore not be because of convergence in the managerial hierarchies that coordinated production and distribution, but because of the creation of organizational forms that took advantage of the political-legal system to organize technologically efficient plants.

Chandler also undermines his argument by making a plausible case that the timing of the entry of a given country into advanced development was a pivotal factor in industrial success. For instance, he presents evi-

Permission to reprint a book review printed in this section may be obtained only from the author.

dence that the British remained wedded to smaller firms with fewer managers and family control and located in older industries, such as textiles and consumer goods, because of the advanced development and relative geographic concentration of the British economy. Existing markets were quite lucrative, and entering new markets where one had little expertise would probably have seemed foolhardy. Chandler equivocates between this type of explanation and simply blaming the British owner class for having no vision. Chandler argues that the late date of German development and the small size of the German market encouraged German entrepreneurs to produce goods for export in the chemical, electrical machinery, and other heavy manufacturing industries. In the United States, the problem was different: the market was dispersed, and large firms were required to exploit it. Timing of entry and existing market conditions proved to be as pivotal for success of firms as anything else.

These problems raise questions about what constitutes organizational convergence, its causes, and how to define success. The extension into related products (scope) is really quite different from the extension into marketing and distribution (taking advantage of scale). Yet, their differing causes and the different organizational mix across firms, industries, and countries are never accounted for. What actually converged across the firms discussed here is only that they grew large and by definition had a lot of managers, which does not say very much about what the managers were doing and what was decisive for their success. Success is defined in a number of ways: maintaining world market share, achieving organizational survival for a long period, having a managerial hierarchy, and using organization to coordinate plants that embed economies of scale and scope. The latter two have the difficulty of using the cause of success as a measure of success. Using these criteria also creates the odd argument that, in spite of the long-run survival of British firms, they were ultimately failures because they did not invest in management.

The methodological problem of deciding what is actually the cause of success for any given firm is difficult as well. Chandler often makes a case that the success of a given firm in Germany or Britain is due to its ability to co-opt its competitors, usually through cartels. Then, in the next paragraph, he will backpedal and argue that it was successful because it took advantage of economies of scale and scope. In the U.S. case, he asserts that the meat packers were a good example of firms using economies of scale but then ignores the fact that for the first 30 years of this century, they engaged in an effective cartel to share the market. In order to make his case, Chandler needs to show that firms that did not engage in economies of scale and scope but were members of the cartels went out of business and vice versa. There is little evidence of this nature and much that suggests poorly organized firms (for instance, U.S. Steel) often survived for long periods of time. In this case, Chandler argues that U.S. Steel lost many of its initial advantages because of its lack of integration, but my point remains.

Most of the largest firms in each country survived for a good part

of this century. Chandler recognizes that there were vast differences in organization across countries but still argues that the use of management to extend distribution and marketing to take advantage of economies of scale and scope was pivotal to their success. To conclude this, particularly when there is ample evidence that these firms differed so greatly in their use and deployment on these and other dimensions, suggests an alternative view: there were many paths to success.

Values in the Marketplace: The American Stock Market under Federal Securities Law. By James Burk. Berlin: Walter de Gruyter, 1988. Pp. ix + 207. \$34.95.

Mitchel Y. Abolafia
Cornell University

The analysis of financial markets offers a sociological enigma that has been explored in recent research by Baker, Abolafia, and the Adlers. In the field of finance these markets are modeled as atomized and frictionless aggregates of individuals. The markets are undifferentiated black boxes of interaction regulated by the invisible hand of market discipline. The assumption that any long-lived institution is undifferentiated and frictionless ought to raise sociological eyebrows. The assumption that its control system is fully invisible and automatic should elicit research and alternative models. James Burk's *Values in the Marketplace* is a study of social control in the stock market and the political and economic forces that shape it. Burk offers a historical case study of the years between the New Deal and deregulation in the seventies. The stock market, as studied by Burk, is neither frictionless nor undifferentiated. He sees an imperfectly integrated institution with limited ability for social control. This is exacerbated by a federal regulatory system that is fragmented and ineffective. The analysis is driven by the author's concern with the market's "moral order" and the relation of that moral order to the public interest.

In the first section of the book, Burk questions traditional economic assumptions and delineates his own assumptions about moral order in the market. He rejects the "natural order" assumption of economics, preferring a modified "structuralist" view in which actors construct the moral order of the market within constraints of the larger society. This theoretical position is used to interpret the dramatic developments in the market following the enactment of federal securities law at the start of the New Deal. The laws do not constitute the new moral order itself; rather, they are the occasion for market participants to reconstruct a beneficent and profitable environment. The outcome of this reconstruction is not necessarily that which was intended by Congress and not necessarily in the public interest.

Burk summarizes a lot of contemporary history in this short book. He offers snapshots illustrating the efforts of various groups of economic and political actors as they work to construct or reform the market's moral

order. The second section of the book deals with the construction of moral order (now called normative order) in the market. In chapter 2 Burk discusses the origins of the federal securities laws. He disputes the popular theory that market failure caused the crash of 1929, thereby creating public clamor for securities regulation. Burk believes that the link between market failures and the securities laws is mediated by symbolic politics and "political contingencies." "The critical event creating the possibility for federal involvement in securities regulation was the opening in the Senate of an inquiry into stock exchange practices" (p. 35).

Chapters 3 and 4 address the reconstruction of the market's normative order following the passage of the new securities laws. The argument in both chapters is based on the author's contention that the new laws made possible a new ideology of "safe investing" that had unintended consequences for institutional developments. In chapter 3 the author argues that changes in ideology led to changes in market organization. Information on corporate earnings made available by the disclosure provisions of the new securities laws shifted market power from the insiders toward public investors and their representatives. In chapter 4 Burk argues that the diffusion of the new ideology not only facilitated the reshaping of market organization, it also helped to redefine the market's boundaries. Fiduciary institutions used the "safe investing" ideology to lobby for revocation of state laws limiting their access to the stock market. By the 1970s institutions dominated trading in stocks. These two chapters offer provocative interpretations of actions and events, but one wishes for greater historical depth and complexity, particularly regarding the influence of ideology on behavior.

The third section of this book examines the consequences of the normative reconstruction described above for the process of market control. Burk shows that the growth of institutional investing upset the competitive status quo and triggered a financial crisis among securities firms in the late 1960s. As a result, anticompetitive arrangements, accommodations to powerful market interests, were challenged by Congress and the Securities and Exchange Commission. With the Securities Reform Act of 1975, Congress set out to restructure the market, but the reforms were of only limited success. Anticompetitive elements remain in the market.

In the concluding section, Burk gives his "normative assessment" of stock market regulation. He concludes that federal securities law has not been effective (p. 141). The legislation had no clear intentions, and it supported outcomes that were unintended and undesirable. Burk blames government for not dealing with the unintended consequences and for capitulating to private interests. Coming after a short but fascinating tour of recent market history, these conclusions are anticlimatic. The limits of regulation are already too familiar.

In sum, this book is a valuable examination of the effects of federal law on the organization of the market. I have two complaints. First, as stated above, I would have preferred greater historical depth to accompany the causal inferences linking actions and outcomes. Second, the

data could have been used to elaborate the theory more effectively. After an interesting first chapter, the theory receives little further development. It was disappointing that the author did not return to the comparative analysis of economic and sociological hypotheses with which he began. Burk's contribution to the sociology of markets, which is substantial, might have been enhanced by trading historical breadth for depth and by elaborating his structuralist view of moral order in the market.

Purchasing Power in Health: Business, the State, and Health Care Politics. By Linda A. Bergthold. New Brunswick, N.J.: Rutgers University Press, 1990. Pp. xv + 213. \$37.00.

Val Burris

University of Oregon

The politics of health care in the United States have traditionally been dominated by physicians, hospitals, and other provider interests. In the decade of the 1980s, this dominance began to weaken as health-care providers were subjected to a combination of enforced competition and new forms of state regulation. In *Purchasing Power in Health*, Linda A. Bergthold seeks to explain these new developments in health-care politics. Her thesis is that the emergence of organized business interests in alliance with the state is one of the key factors explaining the shift of power away from dominant provider interests.

Bergthold situates her study within the parameters of the broader debate on the power of business in American society. She attempts to steer a middle course between the pluralist view that business is just one interest group among many and the opposite view that sees business as automatically unified and politically dominant. She argues that the power of business is potentially great, but historically variable, and that it is most effective when allied with the partly autonomous interests of the state.

Bergthold then examines the economic and political conditions that led to greater involvement by business in the area of health-care policy. She documents the squeeze on corporate profits caused by soaring health-insurance premiums and the creation of new institutional mechanisms for business political activism. She also shows how state initiatives to contain medical costs stimulated business involvement, both directly by actively organizing business input and indirectly by causing hospitals and insurance companies to shift more of their costs onto private purchasers.

Two case studies of health-care policy reform form the core of the book. Drawing on interviews with key actors and the analysis of documents, Bergthold reconstructs the process of health-care policy change in two states: California and Massachusetts. These two case studies allow for a number of interesting comparisons. In the early 1980s, state governments in both California and Massachusetts confronted a severe fiscal crisis as a result of decreasing tax revenues and federal cutbacks. In both cases an alliance of state and business interests eventually succeeded

in passing landmark health-care reform legislation. In Massachusetts, however, business interests were highly unified and played a dominant role in the policy process. In California, factors of political culture, industrial diversity, and geographic size prevented business from achieving the same degree of unity or dominance over the policy process. The policy outcomes in the two states were also sharply divergent. In Massachusetts, where business dominated the policy process, a policy of increased state regulation was passed; in California, where business was less unified, a policy of enforcing greater market competition was implemented.

Bergthold follows these case studies with a survey of business involvement in health-care reform in the other states. The data she examines are generally consistent with the view that health-care policy change during the 1980s was greatest in states facing severe fiscal crisis and where business involvement in this policy area was most pronounced.

In the course of her analysis, Bergthold raises several important issues that, unfortunately, she chooses not to explore. First is the relative exclusion of labor unions and consumer groups from the health-care policy process. Why have these groups generally been unable to secure effective representation in the formulation of health-care policy, and what does this say about the nature of the policy process? Second is the redistributive effect of the latest health-care policy reforms. Have cost savings been achieved through greater economies in health-care delivery, or have the reforms functioned mainly to restrict access to medical care and to shift a greater share of the costs onto workers and the poor? The implications of Bergthold's study for the broader debate on business power would have been much clearer had she given greater attention to these issues.

Purchasing Power in Health is nevertheless an insightful and well-researched study. Bergthold makes a compelling case for the argument that health-care policy has been fundamentally altered during the past decade by the greater involvement of organized business interests. Her two case studies are rich in empirical detail, while the remainder of the book does a competent job of situating these within a broader theoretical context. By examining the exercise of business power at the state level, Bergthold makes a valuable contribution to a literature that heretofore has focused mainly on national or local politics.

The Party Network: The Robust Organization of Illinois Republicans. By Mildred A. Schwartz. Madison: University of Wisconsin Press, 1990. Pp. xvi + 320. \$40.00 (cloth); \$17.50 (paper).

David Knoke
University of Minnesota

Mildred Schwartz's ethnography of the Illinois Republican party during the past decade is a welcome addition to the expanding corpus of political research monographs making explanatory use of network concepts and

principles. Leaning heavily on organizational theory, she offers a detailed account of how a modern political party survived as a significant actor in the political system despite a changing environment of political action committees, mass media, glitzy consultants, and candidate-driven campaigns. The key to the organizational robustness of the Illinois Republican party, which "is typical of other U.S. parties" (p. 17), is its adaptiveness to these complex environmental changes. The Illinois Republican party is a loosely coupled network that incorporates new actors, issues, and relations as circumstances change. It is rationally directed toward the goal of winning elections, which fosters adoption of new technologies for organizing and campaigning. It is a cultural system with a distinctive brand of ideology that keeps its boundaries from eroding. And, it is a system of power, "directed to achieving control over uncertainty," which keeps it ever alert to opportunities for acquiring resources and avoiding debilitating internal conflicts (p. 283).

The empirical heart of Schwartz's project is an elaborate dissection of the network of multiplex relationships among 23 key actors or positions on the basis of years of interviews with some 200 informants. The voters—the party in the electorate—are omitted from consideration except as the backdrop against which these elites make campaign and policy decisions. She derives a single matrix of dense "reciprocated relations" of all contacts made and received among these 23 collective actors. She then permutes the matrix to reveal coherent subsets consisting of a seven-actor core (state senator, state representative, senator, governor, advisor, interest group, and financial contributor), connected to two subsets consisting of centralizing supralocal actors (e.g., state and national campaign committees) and local autonomy-preserving actors (e.g., county chairmen, local committeemen). These linkages yield a party organizational structure remarkably similar to formal matrix-structure organizations, combining the vertical functional with the lateral geographic lines of authority and coordination. Descriptive information on the centrality, asymmetry, and cohesion of actors and positions is derived from this network matrix.

A major disappointment is that Schwartz treats the party network more metaphorically than rigorously. By aggregating all types of ties into a single relationship, rather than separately examining its component ties (money, services, electoral support, issue consistency), she cannot observe how different relations concatenate or misalign and thus reveal loci of tension and cooperation. However, she more than makes up for this superficial statistical approach with thick descriptions of the incidents, events, and environments within which position incumbents operate.

To explain the contribution of Republican party components to collective action in elections and governing, Schwartz modifies Talcott Parsons's four generalized media of interchange, stressing their explanatory role in substantive as well as symbolic terms. She devotes separate chapters to power (used to control and constrain), patronage (used to build loyalty ties), ideology (to define the moral boundaries of the party), and

money (to sustain the organizational framework). Her analyses show how linkages are established and maintained and how different party actors manipulate their access and control over the different media to maintain their dominant positions. For example, although the Illinois governor is the primary source of some 15,000 patronage jobs, Governor Jim Thompson was often perceived by other party members as doing a poor job of dispensing jobs to county chairmen in ways that would benefit the Republican party in election campaigns and state legislative conditions (p. 151). But, Schwartz points out, "making county chairmen angry is exactly what a governor has to do, at least some of the time, if he wants to demonstrate his dominance" (p. 160). Thus, the governor's ambiguity toward patronage serves to enhance his power by stimulating uncertainty and dependency among other party actors. The book is replete with such insightful illustrations of the organizational and network principles that Schwartz applies to her subject, although readers may find themselves learning more about Illinois Republican politics than they bargained for.

The image of a modern political party that emerges from Schwartz's analysis is a loosely coupled network of extensive dependency relations among functional positions, which must cope continuously with uncertainties in both internal and external environments. Despite this appearance of weak structure, Schwartz concludes that the Republican party in Illinois is not in decline or danger of eclipse by the new campaign actors. Rather, in the face of recurring contradictory pressures toward centralization and preservation of local autonomy, the party has succeeded in sustaining its vitality, not by a hierarchical organization of dominance but by a complex clustering of interdependent network parts (p. 267). Mildred Schwartz's persuasive portrayal of these dynamics should convince political sociologists and organizational researchers to give more thoughtful attention to political parties as significant forms of social organization.

The Higher Learning and High Technology: Dynamics of Higher Education Policy Formation. By Sheila Slaughter. Albany: State University of New York Press, 1990. Pp. 293. \$49.50 (cloth); \$16.95 (paper).

David L. Levinson
Merrimack College

Countless reports released during the past two decades have converged on a recurrent theme that U.S. higher education was in a state of crisis. Whether it was disgruntled professors scorning academia for its curricular permissiveness or corporate chief executive officers blaming a falling rate of profit on the poor quality of human capital produced by academic institutions, they all claimed that higher education's failures were responsible for the nation's inability to restore economic competitiveness. Be-

cause of the high cost of this malaise, an array of powerful agents tried to steer higher-education planning to meet capital's needs.

In this extremely important work, Sheila Slaughter analyzes how the leitmotiv of high-technology development as the primary path for economic development has been used to legitimate enhanced corporate involvement in higher educational planning. Her research focuses on the activities of the Business-Higher Education Forum, an ensemble of prominent university presidents and corporate chief executive officers established in 1978. Although the forum purports to represent emergent interests of both business and academia, Slaughter demonstrates how its agenda promotes goals that enhance corporate profit making. Slaughter analyzes the activities of the forum by first considering the sociopolitical context surrounding its emergence and then by discussing the social origins of its members and assessing the degree of consensus among them. Her conclusion is a detailed content analysis of the group's published statements.

Particularly noteworthy is Slaughter's ability to synthesize literature on diverse topics, such as science policy, business-education collaboration, and the sociology of professions, to structure an analysis that encompasses a wide range of analytical concerns. Slaughter effectively uses an array of methodologies to assess the forum's work: the discussion of social origins contains, for example, an excellent application of power elite analysis, and the content analysis of forum reports includes an actual measurement of the amount of text devoted to particular policy pronouncements.

Slaughter's work makes an extremely important contribution to a field that, as the author underscores, has been severely "undertheorized" by both the power brokers involved and researchers who have studied the educational policy formation process. To remedy this lacuna, Slaughter assesses three theoretical perspectives in terms of their interpretive strengths for understanding higher educational policy formation: neopluralism, corporatism, and neo-Marxism. After applying these perspectives to a range of concerns, Slaughter concludes that neo-Marxist theory, albeit with some explanatory gaps, best explains recent developments in higher educational policy formation. While it is understandably beyond the scope of this work for the author to present a detailed elaboration of these diffuse theoretical perspectives, Slaughter's analysis would have benefited from a more in-depth discussion of corporatism. Additional discussion, especially with respect to corporatism's understanding of ideological consensus, could have enhanced her analysis. I believe, for example, that such further explication would have allowed more effective explanation of the state's role in achieving consensus over policy goals than that provided by neo-Marxist theory.

There are a number of interesting findings in this work. In her analysis of the social background of forum members, Slaughter finds that corporate members surprisingly do not belong in the top 1% of the wealthy in the United States but are unified with capital in that they share "class-

wide" interests. Slaughter also points to the discrepancy between statements concerning higher education's importance for economic structuring and the lack of corresponding formal pronouncements by the Business-Higher Education Forum. Although there has been a general assertion by corporate power brokers that higher education must work in tandem with corporations to produce both the human capital and research and development needed for high-tech production, the forum's publications exude relatively little formal concern over this matter. While corporate interests dominate the forum's policy statements, Slaughter concludes that university presidents remain as willful players for they share "institutional values," seeing themselves as partners with chief executive officers who steward an enterprise that embodies characteristics such as "excellence, quality, innovation, independence, creativity" (p. 212).

In conclusion, the primary importance of Slaughter's work rests with the author's ability to elevate the analysis of higher-education policy formation to a higher conceptual plane. Slaughter's research sets the stage for a number of future research projects, ranging from an assessment of the actual impact of the Business-Higher Education Forum on local school districts to an analysis of the role that other organizational power brokers, such as the Committee for Economic Democracy, have played in merging corporate interests with educational planning. This book is essential reading for those interested not only in educational policy formation but also in the contradictory imperatives being placed on the polity by emergent corporate agents.

Testers and Testing: The Sociology of School Psychology. By Carl Milofsky. New Brunswick, N.J.: Rutgers University Press, 1989. Pp. ix + 266. \$35.00 (cloth); \$14.00 (paper).

Jane Hannaway
Stanford University

Testers and Testing: The Sociology of School Psychology is about the daily work life of school psychologists in two distinctly different organizational settings. It is a book that readers concerned with the practice of school psychology will find provocative and one that will be found suggestive, although somewhat frustrating, by researchers interested in the effect of organizational factors on the behavior of organizational participants.

Carl Milofsky interviewed and observed school psychologists in Chicago and in surrounding suburban areas. The Chicago psychologists worked for the Chicago public school district; the suburban psychologists worked for an educational service center that provides special education services to a number of small school districts through a contractual relationship. He also administered a questionnaire to school psychologists throughout Illinois. Milofsky uses his data to paint an illuminating pic-

ture of the jobs of suburban and urban school psychologists. He observes that, although their formal job responsibilities are identical, school psychologists in the two settings differ markedly in the emphasis they give to various aspects of their work. The book tries to explain this puzzle.

Milofsky reports that school psychologists in Chicago carry out their work in a bureaucratic and impersonal manner. They place a high value on objectivity. They process students rapidly through formal test protocols and ward off other information about the children because it might affect their objective interpretation of test results. They see themselves as mostly serving the regular educators. Psychologists in the suburbs, in contrast, define their jobs more broadly, according to Milofsky "more professionally" and "more creatively." They see their work as being in the service of the child and are interested in the whole child. They do not feel constrained by test or organizational procedures or by the interests of regular educators. Reports of the differences in the ways psychologists conducted evaluation sessions with individual students are particularly striking.

The differences Milofsky reports are important. They suggest that the organizational context of urban schools shapes the work of professionals in ways dramatically different from the organizational context of suburban schools. The result is that the services and treatment that urban students receive is different and, in Milofsky's view, inferior to the services and treatment that students in the suburbs receive. He claims urban school psychologists engage in "destructive practices" and carry out their work "in an irresponsible manner," while the work of school psychologists in the suburbs is "careful," "helpful," and "enlightened." Milofsky finds the behavior of urban psychologists particularly disturbing because the students are overwhelmingly minority students and rapid testing and narrowly based evaluations probably exacerbate any inherent test biases against these students. Milofsky has definite opinions about appropriate behavior for school psychologists that are expressed openly and strongly throughout the book.

Explaining the differences between suburban and urban school psychologists is a difficult task, and Milofsky's analysis, while suggestive, is also frustrating. His main argument is that the organizational context of the suburban districts fosters the development of a "moral community" in which school psychologists can actively confront the inherent dilemmas and value conflicts in their work. The context in which Chicago school psychologists work fosters passivity; school psychologists accept a role defined by others and suppress the ambiguities in their work. Milofsky's analysis, however, falls short in terms of identifying what it is about the setting that is important. A number of potentially important context differences are noted throughout the book (e.g., in-house vs. contracted-for services, district size, psychologists' backgrounds, career paths of psychologists, incentives, political pressures, client characteristics, possible work load, etc.), but the reader is not given much help in sorting through the relative importance of these differences in the development

of a moral community of professionals. It is impossible therefore to apply the findings to other settings, and one would have to be very careful about coming to any gross conclusions about urban versus suburban.

The empirical bases for the arguments and conclusions offered in the book are also not always clear. For example, the author reports that he interviewed 33 psychologists in three different settings, in Chicago and in two suburbs. It would be useful to know how many psychologists worked in each setting, what fraction of those were interviewed, and how they were selected. He also observed psychologists at work, but we do not know how many, for how long, or in what setting. Neglecting to report this basic information to the reader is surprising since the author claims the study is an "attempt to study more systematically and in a more quantitative form issues [he] identified in [an] earlier study" (p. 24). The author also presents survey results, but what he reports is very limited. The survey instrument (included in the appendix) suggests Milofsky had data to pursue his arguments more vigorously and more directly.

In short, the book makes an interesting and possibly very important observation. It has general implications for the work of professionals in bureaucracies. While it does not take us as far as I had hoped it would (either theoretically or empirically) in analyzing the phenomenon, it still provides useful food for thought for professional practitioners and organizational analysts.

Apprenticeship for Adulthood: Preparing Youth for the Future. By Stephen F. Hamilton. New York: Free Press, 1990. Pp. vii + 223. \$22.95.

Amy Heebner and Robert L. Crain
Teachers College, Columbia University

By creating a life stage called adolescence, society has made terrible problems for itself. The idea of Americanizing the German apprenticeship system that Stephen Hamilton advocates here could be a very important part of a solution. *Apprenticeship for Adulthood* is also good reading for anyone interested in how sociologists should do advocacy. The book is well researched, clearly written, and polished in its argument. One can easily imagine a school board president or a member of Congress reading this book cover to cover.

The sociological argument—that young people are being wasted by a meaningless high school experience that babies them and provides little opportunity to learn adult roles—has been made before but perhaps never more persuasively. The more than 400 citations show how well Hamilton has gleaned social science for evidence that, for example, many high schoolers find working in fast-food restaurants more valuable than school. The first two chapters offer a detailed picture of the problem of youth employment in America, contrasted with a highly favorable

description of the West German apprenticeship system culled from site visits to commercial and technical apprenticeship programs.

The essential elements of West German apprenticeship are (1) developing workplace learning; (2) linking work experience to academic learning; (3) giving youth constructive roles; and (4) mentoring. According to Hamilton, an American version of apprenticeship would require five more elements, including (1) contracts; (2) earnings; (3) progression of training and responsibility; (4) breadth and depth; and (5) reasonable prospects for future employment. The additions are intended to cope with the special American situation—more concern with educational credentials, less job stability, and less corporate commitment to long-term employment of young people. Hamilton is much more interested in academic and general vocational skills than in specific skills and sees employers as only one part of an apprenticeship system incorporating a wide variety of school- and community-based programs—community service, Sydney Marland's dream of experience-based career education, mentoring, school-based entrepreneurship programs, high school and college hands-on training. These programs all meet his definition: one of his most important contributions is to recognize that what others call experiential learning can just as well be labeled apprenticeship—Foxfire is a favorite example. Hamilton's American apprenticeship program sounds like it could have been designed by John Dewey. In the chapter "Vocational Schooling," Hamilton traces the intellectual and political crosscurrents in the growth of vocational education with a focus on the influence of Dewey's thought. Vocational education replaced apprenticeship during industrialization, despite the efforts of organized labor. Educators like Dewey moderated the tendency to make schools into job-training institutions, emphasizing the need for responsible, thoughtful citizens as well as for productive workers. The West German system has begun to recognize this need and addresses it by providing preparation for citizenship as well as for work to its young apprentices.

Hamilton seems sensitive to the obstacles in the path of implementing a large, complex system of apprenticeship learning, recognizing that "an American apprenticeship system must be flexible, diverse, and open. It must contribute to school credentials rather than substituting for schooling. And it must be aimed primarily at general preparation for work—in other words, education—more than at specific job training, which is an effective means of preparing youth for adulthood but should not become its sole end" (p. 152).

While the book is clear and inspiring, Hamilton underplays the negative consequences of apprenticeship. He argues that in West Germany apprenticeship creates no more class stratification than we have in the United States, but he does not talk about Turkish guest workers or whether an American apprenticeship system can really reach all social classes. He mentions gender stereotyping in West German apprenticeship but offers no solution for either West Germany or America.

At a time when the United States is facing both a youth crisis and a

serious mismatch between workers and jobs, Hamilton's book offers a solution that could be implemented in a relatively short time with far-reaching implications. While the danger of increasing stratification in the economy and education must be considered, this presentation of apprenticeship is important and timely.

Social Representations of Intelligence. By Gabriel Mugny and Felice Carugati. Cambridge: Cambridge University Press, 1989. Pp xi + 196. \$59.50.

Carl Milofsky
Bucknell University

Historically, debates about the nature of intelligence have been polarized. On one side are those, primarily in the field of psychology, who argue that intelligence can be objectively measured using psychometric tests, that it has a high heritability factor, that it is normally distributed in the population, and that intelligence has a strong effect in determining individuals' social class locations. On the other side are those who argue that what constitutes intelligence is socially defined. Because of this, the contents of intelligence tests must be relative to the historical and cultural contexts in which they were created. As we move from culture to culture, what constitutes intelligence is likely to be very different, and those considered bright are likely to have incomparable skills. Genetic effects ought to be minimal, and performance differences across social classes ought to be due more to family and cultural styles than to anything biological. Social experience interacts with genetic constitution in such a complex and powerful way that genetics alone cannot determine social class outcomes.

These two camps opposed each other with special ferocity in the late 1960s and through the 1970s. The political aspects of the debate polarized the discussion and made it difficult to unify the strengths of the two positions. *Social Representations of Intelligence* effectively seeks this synthesis by drawing on the social psychological theories of Serge Moscovici. The theory, articulated in the first and last chapters, is a compelling one. Unfortunately, sandwiched between these chapters are seven others that exhaustively, ineffectively, and unconvincingly describe a 728-response mail survey conducted in Bologna, Italy, and Geneva, Switzerland. The survey concerns public perceptions about the nature of intelligence. The book was written in French, and this translated edition has been published as a volume in a series titled *European Monographs in Social Psychology*. The analytic schism in the book reflects traditional European strength in social theory and an essentially descriptive, nonanalytic approach to the survey work.

The authors argue that we must acknowledge that performing effectively on mathematical tasks or in activities that demand sophistication

in the analysis of texts represents real behavior and behavior that is important in advanced industrial society. One strength of psychometrics is that it describes and measures this behavior effectively. Cultural relativists who study intelligence tend to be forced into the uncomfortable position of saying that these skills are not very important.

The authors argue as well, however, that learning intellectual skills is profoundly social. Children learn from mentors—who may be other children. In the learning process, students and their teachers work out definitions of what constitutes effective performance. Since children are likely to choose as teachers people other than those formally hired by public schools, what children are told about intelligent behavior is likely to vary widely. This is not only affected by the experiences and cultural background of the teacher. It also varies by task. Social tasks are valued differently from mathematical ones, and communication skills are valued still differently. Children are given a smorgasbord of definitions of intelligence, and they also learn to perform tasks that differ greatly in their normative implications.

Gabriel Mugny and Felice Carugati go beyond this kaleidoscopic, but essentially passive, portrayal of childhood learning. Not only are definitions of intelligence shaped by the viewpoint of the teacher; in many learning tasks, neither teacher nor student knows precisely what constitutes intelligent performance. Only as they complete the task do they together work out a definition. Definitions of intelligence emerge from the process of interaction; they are not just imposed on children by powerful, significant others. I find this a helpful formulation for understanding sophisticated cognitive skills of all kinds.

After laying out the theory, the authors seek to demonstrate its power by using a mail survey that asks respondents to answer a long series of questions organized into seven subquestionnaires. The survey instrument seeks to learn how people define intelligence and includes items that tap a number of ways of defining the concept. In the chapters that analyze the survey, the authors use factor analysis to construct a series of abstract types from the survey items. They then explore how subgroups in their population cluster relative to the rotation center of these abstract types.

In some cases, this causes the authors to ignore patterns in the raw data. In others, even though the raw scores they find for particular items are similar between groups, they are led by their technique to assert that differences exist.

This did not make sense to me, and I found much of the analysis of the data to be very frustrating. To make matters worse, the whole exercise did not seem like the right method for testing the theory. I can recommend only the first and last chapters, but not the rest.

The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy. By Ellen Condliffe Lagemann. Middletown, Conn.: Wesleyan University Press, 1989. Pp. xv + 347. \$30.00.

John H. Stanfield II
College of William and Mary

Unfortunately, the evolving study of foundations and society in American social science and history has been impeded by more ideological smoke than academic fire. Although there are a growing number of archives and other data sources on the critical historical roles of American philanthropy and foundations at home and abroad, the study of foundations and society lacks theoretical depth. At best, we have well-written narratives and biographies, and, at worst, there are the back-pats or indictments that may tell interesting stories but do not add significantly to the development of an impartial scholarly literature on the profound historical effects of foundation donors and their venture capital institutions.

Given the situation described above, Ellen Condliffe Lagemann's *The Politics of Knowledge* deserves hearty praise. Lagemann's extensive access to the records and executives of foundations and the freedom she was given to write a critical history of the Carnegie Corporation's domestic programs has enabled her to publish an excellent, comprehensive assessment of its organizational history. She focuses on the historical contributions of the Carnegie Corporation to shaping dominant American sciences, culture, media, and education in relation to public policy formulation.

More important, Lagemann has not only written a first-rate organizational history of the Carnegie Corporation but has also couched her interpretations in a suggestive framework for sociology and politics of knowledge.

In 1911, the Carnegie Corporation was "chartered to advance and diffuse knowledge and understanding" (p. 5). Lagemann analyzes how key decision makers at Carnegie pursued their foundation's mission during their first 71 years. In the three major historical phases of the corporation's funding priorities, scientific, cultural, and strategic philanthropy, there have been several persistent themes. The two most important themes deserve brief mention. First, throughout the long history of Carnegie Corporation philanthropy, there has been a commitment to (elite) liberalism—the hope for a better future through scientific, educational, and cultural means rather than through political and economic change. Although during the 1970s some Carnegie executives and staff members began to question the adequacy of liberal perspectives in resolving societal ills such as educational attainment problems of disadvantaged children, that philosophy has persisted.

Second, the most powerful Carnegie decision makers fashioned and participated in knowledge production and distribution politics. Their politics of knowledge concerned three sets of fundamental problems. These

problems involved decisions regarding (1) "which fields of knowledge and which approaches within different fields would become more or less authoritative and therefore closely associated with the expertise considered relevant to policy-making—which groups would become the key knowledge-producing elites" (pp. 4–5); (2) access of informed citizens to knowledge necessary for making judgments about public policies; and (3) ascribed (gender, race) and achieved (class) status premises of the knowledge-producing elite membership.

Lagemann weaves a fascinating examination of the ways in which liberal commitments of major Carnegie decision makers and their politics of knowledge converged during the foundation's three historical phases. She does this skillfully by offering case studies of such Carnegie decision makers as donor Andrew Carnegie and his close associates, trustees Elihu Root and Henry Pritchett. Their interest lay in promoting elite culture and class preservation through library and great book programs, the development of policy-oriented sciences (e.g., eugenic research, the National Research Council, and economic research institutes), and projects to create or protect the (male) WASP hegemony of library science, medicine, law, and fine arts. Post-World War II Carnegie presidents Charles Dollard, and especially John Gardner and Alan Pifer, attempted to use their foundation's venture capital, which was modest compared with that of new private and government foundations, to strategically influence public policies they viewed as essential for establishing an ordered postwar American society. Lagemann's discussion of strategic Carnegie philanthropy includes Dollard's support for new interdisciplinary designs of social science research and Gardner's interest in educational reform through subsidizing the Conant school studies and cognitive-science researchers such as Jerome Bruner and lobbying for a greater federal government role in public education. Then, during the late 1960s and 1970s, there were Pifer's more activist concerns for the eradication of poverty and inequality in educational attainment.

Throughout her case studies Lagemann demonstrates that corporate philanthropy can be understood best by examining the biographies and social networks of decision makers in key foundations and the characteristics, resources, and restraints of their organizations. She illustrates quite well that philanthropic work is often done through long-standing patrimonial "trusting ties" such as the Carnegie-Root or the Gardner-Conant dyads. In making this point so convincingly, Lagemann tempts us to question the view that foundation decision makers react to markets of ideas instead of creating, selecting, and fostering them, particularly those that influence public policy formulations.

The most significant problem with *The Politics of Knowledge* is that its conceptual framework is not well integrated throughout the text. As a consequence, in some places, such as the first four chapters on scientific philanthropy and the chapter on the Conant studies, the major points of her politics of knowledge framework are demonstrated quite explicitly. But in other areas of the texts, her intriguing conceptual framework is

not so clearly applied. This results in some discussions being a bit too anecdotal and not so analytically sharp.

The chapter on Frederick P. Keppel's sponsorship of Gunnar Myrdal and the monumental *An American Dilemma* is in this regard a most disappointing assessment. Rather than present a fresh perspective on the Myrdal project as one of the great examples of the hegemonic politics of American racial studies in this century and the ironies and paradoxes of its liberal premises and policy recommendations, Lagemann tells us few new facts. Most of the chapter is preoccupied with demonstrating the divergence between Keppel's expectations and what Myrdal actually attempted to accomplish.

Nevertheless, this book will be around for a long time because it is a rich source of ideas about how to raise the study of foundations and society from its impoverished theoretical bed.

Country Lawyers: The Impact of Context on Professional Practice. By Donald D. Landon. New York: Praeger, 1990. Pp. xix + 161. \$39.95.

Austin Sarat
Amherst College

Amid the loud clamor about the "proletarianization," fragmentation, and competitiveness of the American legal profession, Donald Landon's *Country Lawyers* suggests that the idea of a profession that is, in the words of Roscoe Pound, united by a "common calling" has not yet entirely vanished. Landon's argument, which will inspire relief if not celebration in some and be for others just a glimmer of an increasingly irrelevant phenomenon, is that a consensual, harmonious professional community lives just beyond the glare of big-city lights in rural Missouri. Landon means to show that in the legal profession, as in most everything else, social context counts, that the legal profession is an "overdetermined social system" (p. 5).

As this proposition suggests, *Country Lawyers* has a sociological project. In Landon's view the legal profession is not autonomous and self-regulating; it is structured by the broader community in which it is contained. However, while he uses the word "community" repeatedly throughout *Country Lawyers*, Landon gives little attention either to the difficult problem of defining community or to whether community, as opposed to state or market, provides a more important "overdetermining" context for law practice. Landon's research is based on interviews with 201 lawyers in 116 places with populations ranging from less than 2,500 to 20,000, and with 77 lawyers in Springfield, Missouri, a city of 150,000, and yet he treats each of these places as if it were a genuine community. Moreover, though Landon is eager to contest the "community within a community" arguments of scholars like William Goode, he

completely ignores those who insist that state and market provide the right context for studying lawyers and understanding what they do.

Country Lawyers was explicitly designed to replicate the study of the Chicago Bar Association by John Heinz and Edward Laumann (*Chicago Lawyers: The Social Structure of the Bar* [New York: Russell Sage Foundation, 1982]), and one of its most interesting aspects is its systematic comparisons between urban and rural practice. It is not surprising that Landon reports substantial differences between Chicago lawyers and those practicing in small cities and towns (with Springfield lawyers falling in the middle on most measures). In addition, he suggests that the fact that the legal profession in Chicago is heterogeneous, fragmented, and stratified on the basis of the kinds of clients lawyers serve is attributable to the character, quality, and scale of urban institutions, just as "the homogeneity of the rural bar, the entrepreneurial practice style, the commonality of clients and cases, the close consensus on values, and the muting of zealous partisan advocacy are all . . . adaptations to the realities of the small town context" (p. 147).

Landon is at his best in demonstrating the considerable blurring of boundaries that occurs between lawyers and their communities in small cities and towns, a blurring of boundaries that sets up something of a paradox between lawyers' beliefs in their own autonomy and the accountability that a small-town context provides. Most of Landon's lawyer respondents chose small-town practice because they "wanted to be able to 'do largely whatever I like without having someone looking over my shoulder and directing my work' " (p. 28), and part of their satisfaction with their practices is that they feel independent and autonomous.

Yet as Landon demonstrates these lawyers are deeply embedded in their communities. Most grew up and were thoroughly socialized in the towns and cities where they practice, have long-term continuing friendships with many of their clients, and are active in community organizations and civic affairs. As a result, they are highly accountable, "viewed and scrutinized by virtually everyone" (p. 151). Perhaps the lawyers Landon interviewed have such a restrictive view of autonomy that such surveillance does not seem intrusive, or perhaps they have so thoroughly internalized the values of those who are viewing and scrutinizing that they cannot distinguish their own self-scrutiny from the external accountability to which they are subject.

In the end, however, I suspect that Landon has overestimated accountability and underestimated autonomy. I also worry that he has gone too far in characterizing the rural bar as homogeneous and consensual. As he himself acknowledges, "there are those attorneys in small towns who do not join the club" (p. 142). Such nonconformists are characterized as " 'sons-of-bitches' " (p. 152). Landon makes little of such signs of discord. One would like to know more about these "sons-of-bitches" and how their presence affects the community of gentlemen lawyers, the existence of whom is allegedly made possible by the persistence of community in small-town America.

Trade Unionism: Purposes and Forms. By Ross M. Martin. Oxford: Oxford University Press, 1989. Pp. viii + 296. \$55.00.

Raymond A. Friedman
Harvard Business School

Trade Unionism is a book with a broad title, but a very narrow and focused set of topics. The first part of the book examines the ways in which various social theorists have conceived of the purpose of unions. The second part of the book, which is unconnected with the first part (even to the point of having a separate bibliography), presents a topology of union-government relations. Within the constraints set by the author, the book is very informative: if you want to know how Dunlop, Marx, and Tannenbaum differ in their views of unions, or if you want to compare the ways in which unions are supported by political parties or the state in India, France, and South Africa, you will find that information in this book. But those constraints were set far too narrowly. I wish Martin had gone further to suggest what effects different ideas of unions might have had on the development of these institutions and what effects different relations of the union with the state and party might have had on the lives of workers or the management of organizations. Moreover, I wish he had connected the two parts of the book.

Martin begins the first part of his book by stating, explicitly, "I am not concerned with assessing the accuracy of various theories of purpose as descriptions or explanations of empirical reality. I am concerned with them simply as *ideas*" (p. 3). The ideas he is concerned with are: Whose interests are unions thought to be serving and what are those interests? "Pluralists" (a category which includes most scholars within the American and British traditions of labor relations) have the narrowest view of unions: unions attend to wages and working conditions for workers. "Syndicalists" take a broader view of unions: the purpose of unions, in their view, is to overthrow capitalism and, after that, to control productive resources for all workers. "Marxist-Leninists" also see unions as helping to overthrow capitalism, but in this view unions play only a supportive role: it is the party that has political knowledge and that therefore must lead the revolution and govern the state afterward. "Organicists," which include several religious and conservative groups, see unions as a way to ensure labor-management cooperation in the service of the overall social good. And, finally, the "authoritarians," such as Mussolini, Perón, and Lenin, see unions as instruments of the state.

Although I wish that Martin had gone further, this survey of ideas is fascinating: it challenges and puts into historic perspective current Anglo conceptions of unions, which are primarily pluralist with some organicist notions.

While part 1 is a tour of ideas organized by the concept of "interests," part 2 is a tour of "national trade union movements" (by which Martin means national confederations such as the AFL-CIO) organized by a

topology of union-government relations. Martin justifies using this dimension of differentiation by arguing that "there can be no question of the importance generally attached to the relations between trade unions, on the one hand, and the state and political parties on the other" (p. 113). He then offers five types of relations. The most common are: (1) the state dominates the union movement (such as in the Soviet Union and China); (2) political parties dominate union movements (such as in France and Italy); and (3) the union movement is autonomous (such as in the United States and Britain). Two rare cases are: the union dominates the state and a union dominates a party.

After fitting 27 countries into this topology, Martin fits those same countries into a topology of government systems on the basis of the distinction between competitive political systems and noncompetitive ones (i.e., one-party systems). He concludes from this exercise that all autonomous unions are in states with competitive political systems, that all state-dominated unions are in one-party systems, and most party-dominated unions are in countries with a pluralist (i.e., more than two parties) competitive political system with intense ideological antagonism between parties.

I found this part of the book much less satisfactory than the first. I am not sure why union relations with the state and parties should dominate a topology of union movements (especially in light of the range of ideas regarding the purpose of unions displayed in part 1). Moreover, the correlation that Martin finds between type of union and type of government seems nearly tautological. It is not surprising, for example, to find that the type of union that is *defined* in terms of being dominated by the state is found in countries where single-party states dominate the political system. What is still useful about this part of the book, however, is that it shows how differently unions (or, to be more specific, union confederations) in different countries relate to the political systems in which they operate.

Trade Unionism, with its survey of theories and union-government relations, would serve well as one book in a course on labor relations and should be of interest to scholars of the state, but a title that more accurately represents its content would be "Unions and the State: Ideology and Practice."

Becoming a Mighty Voice: Conflict and Change in the United Furniture Workers of America. By Daniel B. Cornfield. New York: Russell Sage Foundation, 1989. Pp. xii + 292. \$35.00.

Howard Kimeldorf
University of Michigan

If the American labor movement is to survive into the 21st century as something more than a special interest group, it will have to find ways

of incorporating new constituencies. In *Becoming a Mighty Voice*, Daniel Cornfield offers a timely and often quite illuminating account of what this incorporation process might look like. Focusing on the United Furniture Workers of America (UFWA)—which has been fairly successful over the years in incorporating women and racial and ethnic minorities not only into its ranks, but also into some of its highest offices—Cornfield examines the classic problems of trade-union democracy through the more contemporary lens of leadership succession.

Cornfield begins, rather courageously by distancing himself from two of the most influential socialist theorists of the 20th century: Robert Michels and Werner Sombart. Michels's "iron law of oligarchy" is taken to task for, among other faults, its "implicit denial of leadership change" (p. 245). In a similar vein, Sombart is criticized for attaching too much weight to intraclass "status diversity," in effect, seeing American workers as "hopelessly divided among themselves" (p. x). Both criticisms, although certainly well taken, are somewhat wide of the mark. While it is true that Michels emphasized the stability of leadership, he also recognized—as he put it in the famous last paragraph of *Political Parties* (New York: Free Press, 1962, p. 371)—that "new accusers," spawned by "the democratic currents of history," regularly arose to displace the old aristocracy as part of a continuing cycle of renewal and decay. Nor is it entirely accurate to say that Sombart viewed working-class heterogeneity as some kind of "immutable" force; in fact, he argued—much like today's stratification theorists—that intraclass differentiation was not an insuperable barrier at all but merely one of several obstacles to class formation. If these qualifications take some of the sting out of Cornfield's critique, his plea for a more dynamic, multifaceted understanding of organizational democracy remains on target and compelling.

Cornfield's position is generally vindicated by the history of the UFWA. Relying mostly on seldom-used archival material and original oral histories from 63 union activists, *Becoming a Mighty Voice* offers a richly detailed yet disciplined analysis of the factors that have contributed to leadership succession since the union's founding in 1939. Cornfield notes at the outset that the degree of leadership stability is not constant across the life of the union but instead varies with the stability of the membership. Thus, the rate of leadership succession—as measured by turnover on the national General Executive Board—is highest during two otherwise very different periods: the 1940s, when the union is growing, and after 1970, when it is shrinking. In both periods, instability increases membership diversity, which leads to the formation of new interest groups that then vie for office. During the 1950s and 1960s, however, with a more stable membership in place, leadership also became more stable. It is only during such periods, Cornfield argues, when the organization is "becalmed," that union governance at all conforms to the iron law of oligarchy.

Much of the book is about the forces that contribute to membership growth or decline and, ultimately, to the incorporation of new leadership.

In contrast to more structuralist organizational models, Cornfield gives full play to the wider political and economic environment in which the UFWA is embedded. We see, for example, how the early Cold War facilitated leadership succession by weakening the union's traditional base among New York City's left-wing Jewish and Italian workers, thus opening up new leadership opportunities for more conservative, ethnically diverse unionists from the Midwest. We also see the significance of employer strategies and, in particular, how, beginning in the 1950s, accelerated capital mobility not only undermined the union but—as a result of plant relocation in the nonunion South and Southwest—eventually brought large numbers of women, African-Americans, and Hispanics into the industry. Once inside the union, the ability of these new status groups to assume leadership positions was enhanced by informal mentoring practices, the UFWA's long-standing ideology of inclusion, and the force of example provided by the new social movements in the 1960s.

Cornfield draws the various strands of his argument together into a dynamic status-conflict theory of leadership succession in labor unions. Union leaders change, he concludes, because of “the periodic diversification, stratification, and factionalization” of their followers, which is rooted in employer attempts to roll back union gains (p. 250). During such employer offensives, new leaderships typically emerge from lower-status, recently recruited groups, whose vision often redirects the union, restoring its momentum.

Cornfield has written a well-documented, carefully argued, at times provocative account of the tension between oligarchy and democracy in modern organization. As such, *Becoming a Mighty Voice* itself speaks mightily to one of the central and enduring problems of our time.

America and the Automobile: Technology, Reform and Social Change, 1893–1923. By Peter J. Ling. Manchester: Manchester University Press, 1990. Pp. vi + 202. \$59.95.

David Gartman

University of South Alabama

The owl of Minerva spreads its wings only with the falling of the dusk, wrote Hegel, meaning that rational understanding catches up with history only as an era draws to a close. So it is with the era of Fordism, that institutional complex of industrial capitalism marked by the combination of mass production and mass consumption. Pioneered largely by the American automobile industry in the years between 1910 and 1950, this regulative framework of the political economy is now in ruins. But the demise of Fordism has produced a spate of scholarship tracing its contingent construction in the clash of conflicting interests.

Peter Ling's book is an important contribution to this emerging literature on Fordism. Finding his intellectual influences in the Marxist geogra-

phy of David Harvey and the revisionist historiography of Robert Wiebe and Alan Trachtenberg, he interprets the development of automobile production and consumption as an integral part of the social, political, and economic changes engineered by middle-class reformers during the Progressive Era. In their attempts to construct a more stable, rational, integrated system of corporate capitalism, the rising class of professionals and managers heartily embraced the automobile as an instrument of reform. With the motor car they not only sought to change the market economy, extending its scope and accelerating its circulation of commodities; Progressives also sought to change people, adjusting them to the alienating demands of capital accumulation by creating a compensating culture of auto-based consumerism.

Between the economic motives and the cultural ones for the imposition of automobility in America, Ling clearly gives causal priority to the first. Progressives advocated the universal adoption of the car primarily to incorporate previously isolated rural producers and consumers into the capitalist market and to accelerate the flow of commodities between its increasingly dispersed and specialized parts. In an interesting and original chapter on rural motorization, Ling argues that Progressives saw the auto as a solution to the problem of "rural isolation." The mobility brought by the rural adoption of the car allowed the construction of more centralized economic, religious, and educational institutions dominated by professionals and articulated to the metropolis. But these changes came at the expense of rural diversity and the rural poor, who could not afford cars. Ling's chapter on highway construction insightfully emphasizes how professional engineers, hiding behind the neutrality of expertise, were able to overcome the fragmentation of local political and economic interests to construct a rationally planned and centrally controlled highway system to expand and integrate markets for corporate capitalism.

The examination of urban transit and suburbanization begins with a similarly economic logic. Middle-class professionals and managers initially pushed urban mass transit as a means of spreading the flow of capital and labor and expanding real-estate development to the suburbs. But Ling must ultimately resort to cultural factors to explain the public defection from mass transit to individual automobiles. It was the middle class's irrational values of social segregation and separate spheres that led its members to seek the insulation of private cars to transport them to their suburban retreats. Progressive reformers imposed these values on the largely immigrant working class in order to adjust and integrate it into capitalism, resulting in its similar adoption of individualized automobility. Less original are the analyses of the last two chapters, which trace the emergence of mass-production technology in attempts by capitalists to eliminate workers' control and the rise of escapist mass consumption as a strategy to compensate workers for the ills of production. Here Ling leans heavily on recent critical scholars, whose works are often not properly credited.

Ling's study of the automobile as an instrument of Progressive reform is an interesting and often insightful resurveying of familiar ground. But the analysis is hampered by two crucial flaws inherited from its conceptual influences. First, along with revisionist historians, Ling underestimates the role of class conflict in shaping the era's changes. He sees the transition to a stable corporate capitalism as the intentional plan of a professional-managerial class, neglecting the extent to which these reforms were a provisional response to, and crucially shaped by, the great labor and populist struggles against capitalism. For example, workers' adoption of the auto was not a strategy of consumerist legitimation imposed by middle-class reformers but the workers' own choice from alternatives limited by struggles that had won higher wages but had blocked self-determination at work. Second, along with Marxist geographers, Ling neglects the central role of culture in shaping American automobility. From the outset the private automobile was shaped by the cultural impulse for a realm of individuality and freedom increasingly denied both bourgeois and worker in the rationalized capitalist economy. If scholars can better understand this complex interaction of culture and class conflict in history, perhaps the owl of Minerva can take flight in time to instruct the post-Fordist world in what it ought to be.

Urban Revolt: Ethnic Politics in the Nineteenth-Century Chicago Labor Movement. By Eric L. Hirsch. Berkeley and Los Angeles: University of California Press, 1990. Pp. xvii + 253. \$39.95.

Holly McCammon
Vanderbilt University

A marked tension in the historical and sociological study of the American labor movement persists between those who argue generally that the movement's limits have resulted from aggressive employer and state countermovements and those who argue generally that the labor movement has limited itself. Those who hold the workers' movement itself primarily accountable for its failure to achieve a revolutionary consciousness (let alone radical social change) frequently build their case around the ethnic, racial, and gender exclusiveness of the organized labor movement. Eric Hirsch's *Urban Revolt* shares this latter perspective. In his study of the late-19th-century Chicago labor movement, Hirsch's primary objective is to explore the ethnic divisions among these urban workers. But Hirsch also furthers our understanding of the dynamics *within* the labor movement. He argues that the exclusiveness of craftworkers' unions did not necessarily preclude organization and collective action for other workers. Instead, lesser skilled workers, who, in Chicago, were predominantly German, Irish, and Bohemian (but not Anglo-American) also mobilized their own organizations.

Hirsch provides a textured history of these workers and their ethnic-

based organizations and offers both cultural and economic reasons for their patterns of mobilization. For example, because of their generally advantageous economic position, highly skilled Anglo-Americans tended toward reformist politics and economic demands that did not challenge the authority of their employers. The Germans, on the other hand, were economically and politically alienated in the larger Chicago society, and they became quite militant with anarchist interests and strategies. Yet, Hirsch explains, there is no fixed link between economic location and political mobilization. The Irish, who were overwhelmingly unskilled, did not pursue radical politics. Although they used the militant mass strike to press their demands, their early entrance into Chicago politics and the conservative influence of the Catholic Church precluded their transforming their economic aggressiveness into political radicalism. Ethnic populations were also not entirely economically homogeneous, yet economic diversity within ethnic groups did not entail diverse mobilization patterns. There were, for instance, some low-skilled Anglo-Americans, but they, like their skilled compatriots, participated in reformist politics. Skilled German cigar makers, on the other hand, joined the radical, not moderate, political parties and trade unions. The crux, then, of Hirsch's argument is that the manner in which workers in late-19th-century Chicago organized and acted collectively was based largely on an ethnic, cultural, and sometimes religious community identity that was defined by both past and contemporary circumstances.

Hirsch's analysis, however, is uneven. Although he makes his case that ethnic groups choose their course of action primarily on the basis of culturally and ethnically rooted ideologies, he fails to take the necessary steps to counter alternative understandings of the dynamics that may have shaped the Chicago labor movement. This may leave the skeptical reader skeptical. Two points illustrate this shortcoming. First, Anglo-American and German cigar makers, equally skilled, did not organize in the same union or in the same political party. The Anglos were, as already noted, moderate in their politics while the Germans were quite radical. Hirsch, asserting that because both are cigar makers they face similar economic circumstances, attributes the difference largely to the Protestant and individualistic orientation of the Anglo-Americans and to a history of free-thinking, revolutionary politics among the Germans. He does not, however, analyze the economic circumstances of the Anglo and German cigar makers. It may have been that the Anglos and Germans, who lived and worked in separate regions of the city, participated in economically different markets within an ethnically segregated industry.

Second, Hirsch gives little attention to the roles of employers and local government in shaping the interests and strategies of the various ethnic groups. The lack of analysis of these factors seems the most serious flaw of the book. Employers frequently used ethnic differences in pursuit of their own ends, to maintain segmented labor markets or to pit one group against another in the workplace or across the picket line. In his description of the eight-hour movement, Hirsch elaborates on the different

points of view of the moderate Chicago Trades and Labor Assembly, which supported a reduction in both hours and pay, and the socialist and anarchist Central Labor Union, which advocated reduced hours with no sacrifice in pay. He gives little time, however, to the role of the police and courts that ultimately crushed the movement, specifically through persecution of the anarchists.

Urban Revolt is worthwhile for those interested in a close examination of the ethnic differences that played a role in shaping the struggles of workers in the Chicago labor movement. Although one may be well advised to read the last chapter first, as it is perhaps the most thought-provoking, the book will provide an interesting, if not exhaustive, analysis of the bases of political mobilization.

Dangerous Truth: Interethnic Competition in a Northeastern Ontario Goldmining Center. By Peter Vasiliadis. Immigrant Communities and Ethnic Minorities in the United States and Canada, no. 21. New York: AMS Press, 1989. Pp. 389. \$57.50.

Philip Corrigan
University of Exeter

The major obstruction to social theory, and thus to the validity and efficacy of social investigations and understandings, remains a persisting dichotomization of dualism allied to investigations (here, of workplace and community stratification) that center and prioritize one category of social difference and erase or marginalize the rest. In a very valuable introduction, Peter Vasiliadis challenges this limitation on our vision in relation to the dominant paradigms for studying Canadian society, which renders the non-Charter nations and peoples "ethnic" others (much more could have been said here about the original founding nations and peoples who have been driven from almost all sociological and much historical representation), and particularly with regard to earlier studies of mining communities, with a specific focus on studies of Timmins, his chosen area. In fact there have been major challenges to the general paradigm that he does not acknowledge (notably in *Breaking the Mosaic* [Toronto: Garamond, 1988], edited by J. Young) along with detailed critiques of the whole "multicultural" or "multinational" model.

He reports how he arrived at Timmins ("less a city than a cluster of small towns and municipalities forced into amalgamation in 1973 to form the City of Timmins" [p. 19]) with an understanding, based on other studies, that there was an "even division between English and French Canadian inhabitants" (p. 1). Instead he found "longstanding groups of Italians, Finns, Ukrainians and Croatians" (p. 1). His research rests on interviews with all the groups, participant observation, and archival research. With regard to the latter he found a dearth of resources ("many records were destroyed during wartime reaction or otherwise hidden,

fudged or restructured in the interest of postwar sensibilities" [p. 21]) or sources of limited utility because of their standpoint. He then raises the crucial, often unasked, question for any halfway adequate social investigation—the possibility (indeed probability) of variant, conflicting, and contradictory versions: as one "vehemently anti-Communist" confided to the author, "*the truth is sometimes very dangerous*" (p. 22, author's emphasis). He organized his initial key informants (using open-ended interviews involving the life-history method) around their parts in and orientation to "the progressive movement." Peter Vasiliadis very importantly locates himself (and his ethnicity, Greek Macedonian) in terms of these crucial early informational and conversational encounters and reports how he found the Croatian and Ukrainian groups the most difficult to engage with. In 1981 the author was joined by other researchers from the York-Timmins Project, whose working papers were, in turn, distributed in the communities in Timmins.

This fine book then recounts an informed history of the Timmins gold-mining communities, beginning (chap. 2) with the origins of Porcupine Camp, preceded by a strike in 1907 after the defeat of which the "skilled and unionized Americans and English Canadians . . . were replaced by increasing numbers of unskilled Finns, Italians and Ukrainians" (p. 35) thought by management to be less likely to form or join unions. In 1911 there was a fire at Porcupine Camp, killing what was estimated by some to be 200–300 people. The sensitivity of this book is revealed in the attention to how this disaster for labor became of real advantage to capital, notably in the persons of Noah Timmins and Frederick W. Schumacher. Timmins—like mine owners the world over—laid out the streets of the town to which he "gave" his name.

The multiple and interwoven stories of differentiated labor and capital are then followed carefully up to and including an account of the three-day festival (funded by the Ontario Ministry of Culture and Recreation, it should be stressed) called "Exploring Our Heritage: The Northeastern Experience, I" (1981). Significantly the term "heritage" (and its cognate "theme" as in "theme park") is now replacing "history" in a quite general attempt to put the recent past into a museum. Just as the singular (and passive) noun "history" denies challenge and diversity of experience and interpretation, "heritage" pretends to a unilinear singular past. Vasiliadis shows how this attempt at pacification accentuated a crisis as to whose heritage and history was to be considered part of *the* "Northeastern Experience." Also central here are the ways in which such expositions entail and produce challenges for limited fiscal and other resources, which, in turn, involve issues of legitimacy when some individual or group claims to speak for the general community of "their" ethnic group.

This major theoretical contribution (as well as a finely nuanced example of historical sociology) should be widely read beyond its apparent specialist audience. It provides a different way of studying social differentiation. However, it suffers from some of the general limitations of all studies of "occupational communities." As many feminists in Canada

have correctly emphasized, the very terms "one-industry" or "mining community" effectively erase the fact that communities also involve other forms of *necessary* social production, notably giving birth, caring for children and the male workers, forms of cultural and other political association not linked to workplace organization (Vasiliadis does mention churches briefly). That is, *communities involve women*. Their suffering under the conditions of the long class wars described in this book cannot go unremarked. As the miners' wives groups in the miners' strike of 1984–85 showed (and as previous histories of women workers' strikes have shown) the convenient fiction of "the private" and "the public" is far truer for the bourgeoisie than has ever been possible for the proletariat.

Continental Divide: The Values and Institutions of the United States and Canada. By Seymour Martin Lipset. New York: Routledge, 1990. Pp. xviii + 337. \$29.95.

Edward A. Tiryakian
Duke University

In at least two important respects *Continental Divide* is very timely in offering a comparative analysis of the United States and Canada. First, two of the world's most important trading partners have entered into a far-reaching free-trade pact that may become a counterpoint to the European Common Market, particularly if Mexico makes it a three-pronged North American market. Second, as this is being written, a constitutional crisis looms in Canada concerning the status of Quebec. Barely 10 years after a referendum led to the downfall of the nationalist and social democratic Parti Quebecois and the return to power of the bourgeois centrist Liberal provincial government, a new cycle of Quebec nationalism has emerged this year. Culturally and ethnically distinct from Anglo-Canada, predominantly francophone Quebec's emphasis on preserving its identity makes it a wild card in the Canadian polity, accentuating centrifugal regionalist tendencies.

Seymour Martin Lipset, one of our most eminent comparative political sociologists, presents in this volume a very clear, readable, and dispassionate analysis of similarities and differences in the institutional normative framework of Canada and the United States. It is an extension of several themes he has developed earlier, particularly those contained in *The First New Nation* (1963) and several more recent essays dealing with "American exceptionalism." *Continental Divide* utilizes a variety of available sources, particularly survey data, citations, and other documentary materials; while not presenting any new data, it uses 227 pages of text to do a good job of codifying and interpreting materials that will be useful to sociologists and political scientists and also provides an imposing, up-to-date bibliography.

Lipset's ingress is the oft-stated proposition that the United States and Canada emerged on opposite sides of the American Revolution: the former became a revolutionary society driven by an ideology of individualism and equalitarianism; the latter embraced a more subdued conservatism that has favored statism and the relation of group or communal identity. Paradoxically perhaps, while provinces have much greater powers relative to the central government than do states in the United States (in that respect, Canada is more of a confederation), Canada has a more liberal/progressive face in various features, such as women's rights, health insurance, and the like. While Lipset makes note of recent convergences between the two countries (an echo of the convergence hypothesis of modernization analysis), his conclusion is that they "remain two nations formed around sharply different organizing principles" (p. 225).

The coverage of this study is extensive more than intensive, with a broad sweep of comparisons of political culture, religion, literature, economic behavior, stratification patterns, and center-periphery relations. The reliance on survey data and opinion polls and the tacit stress on the persistence of Canadian-American differences that can ultimately be traced back to the revolutionary "divide" lead, on the one hand, to a very cursory treatment of the dynamics of change in each country and, on the other, to a magnification of small percentage differences. The rationale for the latter is that "consistent quantitative—though very small—differences that coincide with theoretical expectations are more significant than an unanticipated large one" (p. 148). Perhaps, but nonetheless the reader may feel uncomfortable when much is made of attitudinal differences that amount to, say, less than 10% between Canadian and American respondents on given survey items.

Among the myriad of suggestive comparisons, Lipset finds that American voluntarism retains a greater vitality than does Anglo-Canadian, which in turn exceeds Franco-Canadian voluntarism (p. 147–48). Also suggestive is his hypothesis that "monarchical and republican parts of North America attracted different types of people . . . a population more receptive to Tory-deferential values in the north than in the south" (p. 183). Given the image of Canada as more traditional and monarchical, it may jolt Americans to learn that north of the border there is a greater strength of unionization and labor militancy and that sexual liberalism has made more rapid progress than in the United States (p. 191). A partial answer in value terms may be provided if we invoke the greater strength of individualism and puritanism (or fundamentalism) south of the border.

I view Lipset's study as heuristic and calling for supplementary comparative analyses. First, for a more holistic view of North American institutional and value variability and similarity, a comparison of Mexico and the United States is as needed as the more abundant Canadian-U.S. comparative studies. I say this because there is as much stereotyping and unawareness of Mexico as of Canada (if Canada is caricatured as bland, Mexico suffers from being viewed as spicy). Yet one could make the case

that all three nations have been imprinted by the American Revolution (with Mexico more imbued with the organizing principles, including that of being a federal republic). Second, though Lipset is aware of the specificity of Quebec, he does not really do justice to the dialectics of Canadian/Quebec nationalism. Thus, some of the major architects of modern Canadian national identity—Laurier and Trudeau, for example—have been from Quebec and opposed to Quebec separatism. Quebec nationalism must be understood in terms of a “submerged nation,” perhaps like Georgia or the Ukraine in the Soviet Union or like a non-Serbian republic in Yugoslavia, or even like Wales. A comparative analysis of Quebec and Puerto Rico would be equally fruitful in exploring cultural and territorial enclaves that were incorporated by force rather than by consent in the two larger anglophone societies. In any case, one limitation here to Lipset’s study is that implicitly at least his comparisons are drawn from comparing “centers” rather than “peripheries,” so that generalizations made about Canada when not otherwise qualified are about the core society of WACPs (White Anglo Canadian Protestants).

Continental Divide may be read in conjunction with the more journalistic but equally suggestive broad regionalist view of North America in Joel Garreau’s *The Nine Nations of North America* (Boston: Houghton Mifflin, 1981). For a broader methodological and substantive context, it may also be placed alongside Melvin Kohn’s fine volume *Cross-National Research in Sociology* (Newbury Park, Calif.: Sage, 1989) as an instance of the type of cross-national research in which the nation is the *object* of study (Kohn, p. 20).

The Enabling State: Modern Welfare Capitalism in America. By Neil Gilbert and Barbara Gilbert. New York: Oxford University Press, 1989. Pp. viii + 221. \$32.50.

Larry W. Isaac
Florida State University

Even before being “brought back in,” states had been objects of many a colorful descriptive phrase and associated theorization (e.g., “monopoly capitalist states,” “secret state,” “dependent states,” “Keynesian welfare states,” etc.). Now Neil Gilbert and Barbara Gilbert announce a new state to be added to our inventory—the “enabling state.”

The Gilberts’ entire argument stands on what they call the “welfare-capitalism paradigm” (p. 5)—a taxonomic framework that regionalizes or separates the “public” from “private” spheres, while further decomposing these into, respectively, the “social market” (state agencies, voluntary nonprofit agencies, informal networks of family and friends that follow a logic of resource distribution characterized by unilateral “transfers”) and “economic market” (profit-oriented enterprises, agencies, and private practitioners that follow a logic of *quid pro quo* monetary “ex-

changes"). We see immediately that, by uncritically presupposing a *sine qua non* of liberal (capitalist) social formations—the separation of public and private—there are very few directions that the argument might follow, most quite well worn. And so it is here as we recognize the family refrains (often implicit) of *both* neo-Keynesians (e.g., Walter Heller) on what the state has been and neoconservatives (e.g., Milton Friedman) on what the state should be and is becoming.

The central thesis is this: from the New Deal to approximately the late 1960s and early 1970s, the American welfare state followed the "conventional welfare state" path in which the state controls the finance and production of social-welfare provision. But in the past two decades, the enabling-state model has emerged, by which the Gilberts mean "the focus of public activity has shifted away from production toward the use of direct and indirect measures for financing benefits through the private market" (p. 163). The enabling state provides, quite happily for the Gilberts, "*public support for private responsibility*" (p. 171). To wit: social-welfare provision has become a lucrative, privatized, commercial and for-profit business activity.

Just how and why the conventional welfare state was transformed into the enabling state is not adequately theorized; the Gilberts do not confront major alternative theories of welfare-state development, nor do they provide more than scant attention to historical process. The sketchy theory of this happy neoliberal transformation of a "new mix" in the "mixed economy" (see Neil Gilbert, *Capitalism and the Welfare State: Dilemmas of Social Benevolence* [New Haven, Conn.: Yale University Press, 1983]) goes something like this: within the past two decades, there has been "a significant disintegration of traditional family, neighborhood, and religious institutions" (p. 35). In contrast to what happened in the "prosperous and stable postwar period of 1945–1965," this disorganization has been visited most heavily on the American middle class (the term is assumed to be nonproblematic) as it began to experience "an era of growing needs and heightened insecurity" (p. 35). The needs and insecurities wrought by the disintegration of social institutions and market vagaries have created a "growing middle class constituency for social welfare provisions" (p. 38). Caught between the "rock" of fiscal constraints and the "hard place" of growing middle-class demands for entitlements, the state has moved through a series of legislative steps (e.g., Title XX in 1974, later overhauled by the Omnibus Budget Reconciliation Act and Social Services Block Grant programs of 1981; the Older Americans Act; the Community Mental Health Center Act; etc.) toward decentralization, while broadening the scope of services delivered to those with incomes above the poverty line. Gradually at first (late 1960s through 1970s), but increasingly in the 1980s, profit-oriented providers have captured a larger share of the social-welfare provision market. The logic of unilateral "transfer" characteristics of the social market (in the conventional welfare state) is being supplanted by the logic of the cash-nexus exchange inherent in the economic market.

These basic trends and tendencies are illustrated in several chapters organized by type of welfare provision: personal social services, income maintenance, asset maintenance ("the special case of farm welfare"), health care, and housing. In relative terms, the Gilberts consider that the areas of personal social services and housing have progressed the furthest toward privatized commercialization, with significant and growing parallels in income-maintenance and health-care programs.

However, two deviant cases to this overall trend toward increasing commercialization yield further insights into the Gilberts' argument. Farm welfare is a counterexample because "in contrast to the prevailing thrust of government initiatives, which seek to introduce the 'invisible hand' of the market economy into the workings of traditional social welfare programs, welfare transfers in agriculture promote an *artificial* market endowed by the 'bountiful hand' of the political economy" (p. 119, my emphasis). Presumably, the other markets in social provision that the enabling state has enabled, according to the Gilberts, must be of the tacitly natural as opposed to this artificial variety. The book offers a veritable storehouse of such liberal (in the classical sense) curiosities, contradictions, and regional separations with all of their attendant boundary and balancing problematics.

Education is the second deviant case, standing as a traditional area of social welfare provision that remains relatively immune (for the moment, but "ripe for change" [p. 163]) to the enablement of the enabling state. The Gilberts' preference for the consequences of increasing privatized commercialization of social provision is most evident here: "Unlike housing, the overwhelming majority which is produced and owned privately, education in primary and secondary schools is almost a public monopoly; in contrast to private housing, the vast majority of which is in relatively decent condition, public education is in shambles" (p. 163).

There is a distinct social accounting flavor to the bulk of the book. And to accent that flavor, the book's last chapter is on the measurement of welfare effort and implications for comparative study of welfare states. However, the placement of this material as final chapter (rather than in an appendix) robs the book of whatever substantive-theoretical finale it might have delivered.

The Gilberts have written a serious book that is not without use value. I would recommend it for several reasons: first, the final chapter on measurement could be useful for cross-national comparative analyses; second, some of the data on the character of privatization in various categories of social provision might be appropriated in more critically constructed theoretical historical work; and third, the uncritical acceptance and centrally explicit deployment of various liberal antinomies (public/private; social market/economic market, etc.) make this a wonderful negative example—that is, it shows how not to theorize the welfare state, be it conventional or enabling. More generally, if you are looking for an up-to-date overview of trends toward privatization of social wel-

fare painted in mostly neoliberal happy hues, *The Enabling State* might fit the bill.

Awash in a Sea of Faith: Christianizing the American People. By Jon Butler. Cambridge, Mass.: Harvard University Press, 1990. Pp. xiii + 360. \$29.50.

Robert Wuthnow
Princeton University

Yale historian Jon Butler is one of several specialists who have been revising our basic understanding of American religious history in recent years. His latest book presents a sweeping, and yet detailed and authoritative, description of the major religious developments in American history during the two centuries before the Civil War. On the basis of a wide-ranging compilation of evidence from such primary sources as letters, sermons, almanacs, and fiction, and an extensive knowledge of secondary sources, he builds an armamentarium of minutiae and anecdotes for arguing five central theses.

He argues, first, that American religion was more complex than it has often been portrayed. His chief animus here is the Puritan-oriented conception of Edmund Morgan and Perry Miller. Butler's version moves outside of New England, paying more attention to the middle colonies, the South, the frontier, and the early federal period. He also emphasizes both denominational complexity and the internal variations that can be seen by looking more at popular spirituality than at institutional history.

Second, the religious expressions of the 18th and 19th centuries included a strong dose of authority and coercion. The period, Butler argues, cannot be understood mainly in terms of religious freedom replacing state church coercion and individualistic piety replacing corporate spirituality. As government sponsorship of religion receded, denominational authority took its place. What Butler calls "republican hierarchicalism" became the dominant pattern: authority flowed from the top down in denominations, rules of social conduct and belief were imposed on members, and men with social position played a powerful role in shaping the ends of religious organizations.

Third, the religious history of this period cannot be understood apart from the enormous consequences of slavery and the role played by Afro-American spirituality. Here, Butler adds to what is already well known: white Christianity condoned slavery and effected a veritable holocaust on black spirituality; a strong Afro-American Christianity gradually reasserted itself and has made an important contribution to the wider religious culture as it presently exists. Butler observes the syncretism and emotionalism that characterized black spirituality but notes that these features were also widespread in white churches.

Fourth, he argues that magic and superstition remained a vital and widespread ingredient of American religion during this period. Witchcraft, sorcery, divination, and astrology all flourished. They did not die out, as some have supposed, after the Salem witch trials. Nor were they limited to the poorly educated in the hinterlands. Yale president Ezra Stiles delved deeply into everything from alchemy to the Cabala, and, in ways not unheard of in our time, Mary Todd Lincoln made use of sorcerers and astrologers. Moreover, such activities were often condoned by the established churches.

Finally, he contends that the overall direction of religious commitment was one of growth rather than decline. Denominational institutions garnered resources, deployed careful planning to start new churches, and created regional networks that outpaced the growth in the business arena. Between 1780 and 1820 approximately 10,000 new churches were constructed, and, during the next four decades, another 40,000 were added. By 1850, the proportion of the population that was listed on church rolls was at least double the figure in 1800. Church leaders also fostered an image of growth by increasingly depicting America as a Christian nation.

This new interpretation of American religious history (Butler is not alone in offering it) is likely to be disturbing to many who have viewed our nation primarily through its secular institutions, even if they have not swallowed the whole theory of secularization in its crudest forms. We are being asked to acknowledge that Americans did not simply wrest control of their lives from a stodgy Puritan patriarchy and turn it over to a secular system over which they had greater control. We are being asked to question whether the growing complexity of industrial life necessarily undermined religious institutions. We are also being asked to see that the growth of democracy did not, as it did in Europe, lead to a rejection of the religious establishment.

If the revisionist view of our religious heritage challenges these textbook assumptions, it nevertheless gives little cause for rejoicing among those who have doubted these assumptions all along. That view—popularized again in recent years by politically minded religious conservatives—has held that our nation worked well until very recently because it enjoyed the leadership of devout Christians. Much to the contrary: the evidence indicates that America was scarcely dominated by Evangelicals. It was always an amalgam of saints and heretics, believers in folklore and magic, zealots, reformers, snake handlers, hypocrites, and the privately devout. The faithful were still human, contributing to the common woe as well as to the commonweal.

Historians seem to suffer (at least in the eyes of sociologists) from the assumption that everything now present was somehow there in the past as well. Butler's logic exhibits this tendency on occasion when he tries to plant hooks to capture the interest of nonhistorians. But there is also a deeper message here that sociologists will find appealing. Butler's history is a story of organization and mobilization. Religious impulses do not, in his account, stem entirely from individual psychology; nor do they

reflect macroscopic forces in the larger social structure. If Christianity became a more powerful social factor in the 19th century, it was because of leadership, new methods of organization, a flexible belief system that encouraged adaptation to a heterogeneous environment, skillful management of financial resources, recruitment and training, and vast borrowing from other realms.

Despite the considerable differences that separate the perspectives of sociologists and historians, Butler's book is thus a testament to the possibility of fruitful interchange between the two. The next generation of sociologists will do well to seek greater exposure to works like this.

Literary Methods and Sociological Theory: Case Studies of Simmel and Weber. By Bryan S. Green. Chicago: University of Chicago Press, 1988. Pp. viii + 303. \$45.00 (cloth); \$15.95 (paper).

Donald N. Levine
University of Chicago

This pioneering if exasperating work examines selected texts from Simmel and Weber by importing the latest strategy in literary studies, one that configures a text by examining its readers' responses. The project stemmed from a long-held wonder: Why do sociologists keep returning to classic texts? Bryan Green's initial response seems compelling. He says that *these texts harbor value above and beyond their utility for guiding empirical research*. However, rather than locate this value in what the authors have to say, he makes the idiosyncratic move of attending to *how they say it*.

Green proceeds by searching for "the dynamics of a compositional process, not . . . a summary of thematic content" (p. 42). Along the way, he discovers Cooley's *Social Process*, which affords a model of "text work" comprising "latent tendencies" and "tensing elements." The latter are said to consist, plausibly, of stimulants and obstacles that the reader encounters; the former, mystifyingly, of neither the authors' intentions nor the thematic contents but of "generically specifiable anxieties of writing." The mystification swells when he calls one of them "the anxiety of ontological emptiness" and imputes such an anxiety, without clarification, to Émile Durkheim! Frustration mounts under bombardment by passages from an array of dizzyingly diverse literary theorists.

Simmel gets introduced with the familiar litany of readers' responses—cunning, evasive, dazzling, relativistic, artistic, fragmentary, and paradoxical. Green uses such epithets to highlight Simmel's stylistic traits—like the double-sided turning of thought objects from facet to facet—and to probe the sense in which Simmel's thought may legitimately be termed "aesthetic" (not, he properly notes, because of Simmel's choice of aesthetic topics or because of his life-style). Green's summary interpretation depicts Simmel's style as "simultaneously dialectical,

reflexive, and deconstructionist"; it is, finally, "writing that refuses settlement."

While I found this formulation illuminating, Green's treatment of it bothered me in two ways. First, he derives it by employing elaborate interpretive tools, yet their applications trip him up—partly because, not knowing German, he cannot consult the original text, partly because he often resists Simmel's own logic. Thus, he makes much ado of Simmel's statement that, in contrast to historical interpretation, the substantive meaning of a phenomenon often rests on "connections of a conceptual, psychological or ethical nature that are not temporal but rather are purely material." Green takes this to represent Simmel's intention to unsettle the reader by using a dichotomy—temporal versus material—that confounds conventional notions that equate temporality with corporeality (p. 105–6). The problem is that Simmel's German term here is *sachlich*, not *materielle* or *körperlich*; in other words, Simmel is contrasting *objective*, not material, with temporal or historical—a perfectly plausible contrast.

Even if such contorted interpretations do not always make Green's point, it remains true that Simmel's style "refuses settlement" in the sense of setting up notions only to challenge or reverse them. Yet here I must protest the assimilation of Simmel into the deconstructionist camp. If the aim of the deconstructionist game is to "decenter" accepted thoughtways, Simmel's aim is avowedly *constructive*: to show the utility of employing *multiple centers*. As Simmel confessed:

The tendency of our times was to decompose everything that is substantial, absolute, and eternal into the flux of things. . . . One could keep this tendency from issuing in an unprincipled subjectivism and skepticism only if one substituted, in place of those substantive fixed values, the dynamic interactions of elements. . . . The core concepts of truth, value, objectivity, etc., gave way, in my thinking . . . to a notion of reciprocal relationships—a view of them as products of a kind of relativism that signified no longer the dissolution of all uncertainties, but precisely their guarantee by means of a new conception of certainty. [*Buch des Dankes an Georg Simmel*, edited by Gassen and Landmann (Duncker & Humblot, 1958)]

Some may find Green's chapter on *The Philosophy of Money* an interpretive tour de force. I found its method tortuous, its conclusion—that the real subject of this book is *language*, even though Simmel himself never identifies it as such—farfetched. Indeed, Green's assiduous indifference to what Simmel actually says disposes him to ignore Simmel's arguments for precisely the kind of "autonomous theory" Green is championing.

In one of the few places where Green does discuss content, he catches only one side of Simmel's dialectical argument: "When [Simmel] came to analyze [the] conditions of unique individuality, it was in terms of a fateful tragedy, an inevitable overwhelming of subjective individuality" (p. 93). This ignores Simmel's extensive discussions of conditions that

promote individuality in modern societies, not to mention his arguments that to express one's individuality figures as a kind of modern moral imperative (in "Das individuelle Gesetz") and his prescriptions (in *Schulpädagogik*) for educational practices that enhance the development of individuality.

Considering Weber, whose compositional method he glosses as part of a genre of writing identifiable under the term *casuistry*, Green offers an incisive account of the two tensions that are jointly necessary to generate a casuistic mode of discourse: (1) fidelity to the concrete and particular versus optimal, valid generalization and (2) ethical efficacy versus objective assessment, ("value relevance" vs. "value neutrality"). He connects Weber's style to an ethical intent, in the service of "education of judgment" (Weber's phrase) by promoting "resistance to the unreflective determination of social decisions by value habits and emotions built into language use" (p. 229).

As a case in point, Green cites the material on race, ethnicity, and nation in *Economy and Society*. He suggests that the effect of Weber's treatment of each of those terms is to undermine their validity as unambiguous, compelling denotative markers. Some of the literary devices he identifies as working to this purpose include suspension of the indicative certainty of key terms through use of quotation marks, metonymic shifting of charged terms to words with little or no emotional charge, and ironic inversion of what charged terms normally signify.

Green's final move is to stake out evaluative criteria for sociological theory. Immanent evaluation proceeds by measuring authors by the norms of the genres one has ascribed to them. Since he has identified deconstructionist writing and situated casuistry as the intrinsic features of Simmel and Weber, respectively, when they relapse into conventional nomothetic sociological work, Green turns these criteria against them by labeling such lapses "degenerate" writing. One winces to think that Simmel's analysis of dyads and triads or Weber's correlation between the life conditions of status groups and their religious orientations must be judged degenerate by so stringent a criterion.

There is something perverse in a book about close reading written by an author who neither reads the original texts nor considers the dazzling architecture of a uniquely structured masterwork, who purports to address sociologists by picking a canonical work of sociological theory that is neither canonical nor sociological, and who finds degenerate what most sociologists find inspirational. Even so, evocative moments in this work suggest a refreshing new way to explore sociological texts.

Theory in Practice: Tocqueville's New Science of Politics. By Saguiv A. Hadari. Stanford, Calif.: Stanford University Press, 1989. Pp. vii + 182. \$27.50.

Jeff Weintraub

University of California, San Diego

This book is an intelligent and ambitious contribution to the current Tocqueville revival; though it has serious weaknesses, the central intention behind it is in many respects well conceived. Its chief strength is Saguiv A. Hadari's awareness that the most intellectually valuable way to approach Tocqueville is not to treat him merely as a source of isolated insights. Hadari insists (correctly) that Tocqueville be recognized as a major social theorist, whose penetrating analyses emerge from a powerful and coherent organizing perspective—one from which we can draw important lessons and theoretical resources. But capturing Tocqueville's distinctive style of social theorizing is no simple task, in part because he is not an ostentatious analytical system builder; rather, in each of his works, the theory is woven seamlessly into the concrete analyses. Reconstructing it requires an effort of interpretation and explication—which has, so far, been considerably less thorough than with such figures as Marx or Weber. Furthermore, as Hadari correctly notes, most of the better treatments have focused on the substantive themes in Tocqueville's theories. Hadari's book is one of the relatively few attempts at a systematic reconstruction of the theoretical *method* informing this exceptionally successful venture in theoretical practice.

Hadari brings to this useful endeavor a thorough familiarity with Tocqueville's own work and a knowledge of most of the important secondary literature; he is also acquainted with a wide range of contemporary discussions in theoretical method and the philosophy of social science, from hermeneutics and Habermas to game theory and rational choice. (Aside from Tocqueville, however, almost all his references to thinkers from the 19th century and earlier have a distinctly secondhand feel.) And many of his analytical intuitions strike me as being fundamentally on the right track.

I would therefore like to be able to report that the book is successful in achieving its aims. Unfortunately, this is not quite the case. While the book certainly makes an intelligent and useful *beginning*, its treatment of Tocqueville is considerably less incisive and illuminating than it might have been. The analysis is uneven and remains, on the whole, sketchy and underdeveloped. Too much energy and space are devoted to establishing relatively straightforward and obvious points (and to summaries of currently fashionable debates). On the other hand, Tocqueville's arguments are rarely explored in sufficient depth and complexity, and the same is true of the most suggestive and potentially illuminating ideas that Hadari himself advances.

Hadari's starting point is promising. His reconstruction focuses on

three central issues: (1) "Tocqueville's use of abstract, formal models" (p. 3) and his ability to shift effectively back and forth between abstract models and concrete cases; (2) Tocqueville's use of interpretive or hermeneutic analysis; and (3) Tocqueville's success in combining a powerful "normative stand" with rigorous and objective scientific inquiry. What makes Tocqueville exemplary is his ability to integrate all three of these strands effectively, and thus to bridge a number of apparent antinomies in social theory.

Each of the three main sections of the book takes up one of these elements, moving from illustrative cases in Tocqueville's own works to current debates over relevant issues. A concluding chapter then suggests (very sketchily) how these three strands are actually interwoven in Tocqueville's analyses and how we might profit from Tocqueville's example.

The section on formal models is interesting and informative, though not exciting. Unfortunately, while it purports to examine Tocqueville's use of abstract models in general, it actually deals only with a very restricted range of such models: that is, game-theoretic models—usually emphasizing the aggregation of individual "micro-behaviors" into unintended collective outcomes—which "are anchored in methodological individualism and assume rational, self-interested actors" (pp. 20, 26). Tocqueville does make arguments of this sort on occasion, but they hardly exhaust his use of analytical models; and they are certainly of secondary importance when compared—for example—with his more relational and institutional models or his masterful use of ideal types. For an analysis that sets out to reconstruct "Tocqueville's method as a whole" (p. 149), this focus is too narrow—in fact, rather misleading.

Hadari then devotes almost an entire chapter to establishing that interpretive or hermeneutic analysis is a key element of Tocqueville's theoretical perspective. What serious student of Tocqueville ever doubted it? This labored demonstration of the obvious is not followed up by a very probing or illuminating account of what is distinctive about Tocqueville's particular interpretive approach. It is characteristic, for example, that Hadari mentions in passing the crucial significance that Tocqueville attributes to "mores" (pp. 84–85)—but then, remarkably enough, attempts no careful or systematic explication of this central concept. The third section, despite some insightful observations, is in the end the most disappointing: Hadari never manages to put together a clear or coherent picture of Tocqueville's "normative stand" and its place in his theoretical approach.

Why does the book fall so far short of its promise? In addition to the reasons already noted, a pervasive weakness is that this sort of methodological elucidation really demands a more precise, subtle, and comprehensive grasp of Tocqueville's *substantive* arguments than Hadari usually displays. I am afraid his accounts of these arguments tend to be conventional, oversimplified, and often superficial (as well as fragmentary, which may be due in part to the book's organization). The discus-

sion's lack of historical depth and texture is also damaging, especially—but not exclusively—when Hadari attempts to assess the novelty and distinctiveness of Tocqueville's ideas.

This book was clearly a labor of love for its author, who—the preface informs us—completed it during the last year of his life before dying at the age of 32. It is evident that Hadari was a thoughtful and intelligent scholar, and it is a great loss that he was unable to pursue further the project undertaken here. As it stands, his book can be recommended to readers interested in Tocqueville and in the issues he addresses—but only with reservations.

Beyond the Barricades: The Sixties Generation Grows Up. By Jack Whalen and Richard Flacks. Philadelphia: Temple University Press, 1989. Pp. viii + 310. \$29.95.

Howard Schuman
University of Michigan

The question posed by this book is: What happened to those who gave up ordinary student life in the 1960s in order to cast their lot with an imminent revolution, only to discover that nothing like a revolution was occurring?

Jack Whalen and Richard Flacks have tried to answer this question by interviewing, at several points over the past decade, 18 students who had been indicted in 1970 in Santa Barbara for radical actions, including the burning of a bank. Opposition to the Vietnam War was central to the political movement, but the activists saw the war as tied to the university administration, capitalist exploitation, and repressive government, though the book does not focus clearly on their ideology. The authors also interviewed 16 former fraternity and sorority students as foils showing more typical development through college and into middle-class life; more interesting might have been a comparison group of liberal students strongly opposed to the war but less caught up in apocalyptic visions.

The book accepts the conclusion of recent survey studies that most 1960s activists continue to support their original causes, rather than shifting sharply to the right. The contribution of this "qualitative life-history" book, the authors say, is to show "the routes the activists followed as they made their way from the sixties to the eighties . . . [and their] struggles to reconcile principle and pressure" (p. 4).

After an initial description of radical actions and police overreactions in Santa Barbara, Whalen and Flacks emphasize the degree to which the activists interpreted such local happenings as a sign that national—or even world—revolution was at hand. Particularly valuable is the subtle portrayal of the connections between the radical movement and the larger counterculture that developed during the same period: they shared a

rejection of mainstream institutions and conventions, but the radical movement called for subordination of the self to collective action, while the counterculture emphasized devotion to the self and even its indulgence. Failure to resolve this conflict, and, in the longer run, to reconcile political commitment with the need for personal development, was, in the author's view, a major weakness of the New Left.

The authors follow their subjects through their thirties, concluding that some found ways to maintain their earlier radical activism, some became "disengaged [inactive] radicals," some moved toward "left-liberal" positions, and a very few (only one example is given at length) developed beliefs with clearly conservative elements. The last chapter, the best in the book, not only draws together the story but places it in the context of larger historical trends that, paradoxically, seem not to have been salient to the activists most concerned with making history.

Whalen and Flacks raise important issues, and their accounts of individual lives, though fragmentary, are intrinsically interesting. However, their book has significant limitations. Theoretically, they make occasional useful comparisons with radicals from the 1930s but might have gone further afield to point up problems common to others who staked their hopes on transformation of the world, for example, the earliest Christians who expected the Kingdom of God to arrive at any moment. In all such cases some adjustment to dramatic disappointment is called for, together with the problem of reconciling total commitment to a movement with the ineluctable needs of the self.

Methodologically, extending and deepening what can be known from standardized surveys is greatly to be valued, but this sample of activities is so small and unclear in representation that it is hard to know what generalizations can be drawn. At times the authors' application of terms like "many" and "most" to their sample implies a quasi quantification but without the discipline that self-critical attention to numbers can provide. More important, melding the large but necessarily superficial survey approach with intensive qualitative interviews can be most productive when the two are better connected, for example, when the smaller sample is chosen from the larger one and the researcher moves back and forth between the two to take advantage of what each has to offer.

An important inference from the book is the sense that the 18 activists had little awareness of the history of the past two decades, though whether this was really the case or is due to the absence of probing in the interviews is not clear. (The authors mention having used an interview guide in order to raise the same issues with all respondents but neither print nor describe the guide, and the individual accounts are quite uneven in coverage.) In any event, it would be fascinating to know how these 1960s radicals—most of whom had wished for some form of socialism—perceive the onrushing present. One guesses—or hopes—that Whalen and Flacks are already beginning a new set of interviews with their respondents, now around 40 years old and faced with a world transformed by a true revolution: the collapse of state socialism in East-

ern Europe and its loss of credibility throughout much of the rest of the world.

Social Origins of the Iranian Revolution. By Misagh Parsa. New Brunswick, N.J.: Rutgers University Press, 1989. Pp. xiii + 348. \$40.00.

Bertrand Badie

Institut d'Etudes Politiques de Paris

Keeping his distance from a sociology of social mobilization, Misagh Parsa criticizes the generally accepted hypothesis that the Iranian revolution is a result of a social breakdown. He pertinently rejects an oversimple explanation that relies on an economic development paradigm, as he challenges the theory of relative deprivation that is, however, more accurate. The recently urbanized rural migrants who are unable to join the alien urban society as well as the new middle classes who are expecting and demanding modernity, while being strongly unsatisfied in this attempt, experience deprivation and thus revolt.

His review of classical theory is convincing: although promising, such theories fail because of their holistic orientation and neglect of the functions of social action and, particularly, of political action. In addition, various empirical researches have stressed that these rural and urban groups did not play the most active role in the political mobilization process of 1978 and 1979. By emphasizing the role of social action, the author weakens the cultural explanation linking the Iranian revolution to Islam, as well as the role of the Shiite religious elite in the revolutionary process.

This is why Parsa elaborates a structural theory of revolution, drawing on Tilly's work and the resource-mobilization tradition that emphasizes the capacity of competing groups to organize the social movement and the involvement of the state. Parsa is thus led to explain the Iranian revolution by referring to the opposition between a state deeply involved in the unequal transformation of the society and a network of strong social solidarities, originating in state structures and all the more able to confront the state. This kind of analysis tends to confer an essential function on the *bazaris*, who were the main victims of the economic policy of the Pahlavi state, alienated from it, and involved in well-organized communities. They thus take precedence over the Shiite clergy.

The analysis is often convincing, always rigorous, and well documented. The comparative perspective is relevant, particularly when Parsa compares the Iranian revolution with the Nicaraguan one and when he keeps his distance from developmental perspectives and from the misuses of cultural analysis. The fact remains, however, that some flaws emerge from this construction. For example, the role of the state deserves a more detailed analysis: the vulnerability of the state cannot be accounted for only by its involvement in the economy, but also by its

very nature. The Iranian state is also weakened by a deep patrimonialism and a precarious institutionalization. Its failure stems more from this neopatrimonial identity than from its multifunctional involvement. Besides, the marginalization of the cultural factor leads the author to underestimate the problem of legitimacy, which is really the core of the Iranian political system crisis. It is necessary to take into account the inability of the state to conceive a legitimate blending of Islam with modernity, as well as its efforts to elaborate alternative formulas (bureaucratic, personal, even pre-Islamic) which had very weak mobilization capacities. All these topics stress the differences between the Iranian monarchy and other conservative regimes of the Muslim world. Finally, Parsa does not deal with all the consequences of the crisis of the political arena, particularly with the political "disinvestment" that led many parts of the population to choose an exit strategy and to elaborate community solidarities through which the religious actors could achieve a higher capacity for collective action and mobilization. This process of exit is increasingly important in the Muslim world, as well as in the other developing countries in which the crisis of the political system is expressed by different kinds of religious revivals, primarily by the growth of religious sects.

Why People Obey the Law. By Tom R. Tyler. New Haven, Conn.: Yale University Press, 1990. Pp. vii + 273. \$30.00.

H. Laurence Ross
University of New Mexico

This book addresses one of sociology's central issues, that of the basis of compliance with rules. Although the issue is stated and researched in the context of formal rules only, its implications for the entire substance of sociology are clear and warrant our discipline's broad attention to this work by a professor of psychology.

Tom R. Tyler attempts to answer the question of the degree to which compliance with rules is linked to normative, as contrasted with instrumental, considerations. Do people comply with rules primarily because they perceive they have something to gain thereby, whether directly or indirectly, or do people comply because they feel they ought to, regardless of the outcome? Furthermore, to the extent that normative considerations are central in compliance, how do experiences with rule administration lead to perceptions of institutional legitimacy and of an obligation to obey the rules?

The data base that is mined to answer these questions is a large-scale telephone survey of Chicago residents. A sample of 1,575 respondents was interviewed in 1984, and a subsample of 804 was reinterviewed after a year. This design permits panel analysis as well as the usual modeling of cross-sectional data in an effort to determine causal relations in the data. Compliance was measured with respect to six criminal laws: dis-

turbing the peace, littering, driving while intoxicated, speeding, petty theft, and illegal parking. The results were related to measures of deterrence (perceived likelihood of punishment for violation), peer disapproval, and personal morality. Additional questions dealt with experiences with legal authorities, both police and courts, and with various aspects of perceived fairness. (Fifty pages, or nearly a fifth of the text, is devoted to an appendix presenting the survey instrument.)

The analysis found that compliance with legal rules is strongly related to the perceived legitimacy and morality of the authorities but not to instrumental concerns, including the likelihood of punishment or peer attitudes. In other words, much of the current dialogue concerning the relationship between legal policies and behavior that focuses on deterrence is irrelevant to the principal mechanism of compliance. Furthermore, perceptions of legitimacy and morality are explained by evaluations of experience with the authorities. This experience is analyzed on dimensions suggested by the work of Thibaut and Walker, and of Leventhal, who provides a broader list. Leventhal's criteria of procedural fairness include representation (the procedural control variable that preoccupies Thibaut and Walker), along with the apparent fair intentions of the authorities, their honesty, the quality of decisions, the opportunity to correct errors, and the absence of bias. Overall, "in judgments of procedural justice the absolute and relative favorability of one's outcome explained 1 percent of the variance beyond what can be explained by the other criterion of procedural justice. In contrast, noninstrumental criteria of fair procedure explained 47 percent of the variance in judgments of procedural justice beyond what could be explained by favorability of outcome" (p. 139). The evidence leads to insights and recommendations concerning policy, for example, that the popularity of informal rules systems can be explained by such systems' corresponding more closely than formal ones to people's intuitions regarding procedural fairness and that decision makers may in fact have much more latitude to make unpopular decisions than they generally assume, so long as the decisions are reached by a process perceived as fair.

As significant as I found the topic of this book, and intriguing and satisfying as its results may appear, I must confess to some concerns about the analyses. Most notably, the work fails to allay doubts concerning the validity of responses to survey questions about illegal behavior. How completely and honestly did these telephone respondents answer the investigator's questions? Perhaps partly to deal with this issue, and to ensure some variability in compliance, the legal rules were hardly a representative sample of the criminal law but instead displayed a strong bias in the direction of trivial rules, unintegrated with morality. Moreover, many of the variables relating to complex theoretical constructs were measured by a mere one or two items, which suggests the possibility of oversimplified and insensitive indexes.

These measurement problems may explain some paradoxes, such as

the fact that people expressed highly positive expectations of the future behavior of police and courts, while simultaneously being rather critical of their past experiences with these agencies. But if these paradoxes can be dismissed as artifacts of method, can one be complacent about other findings that support theoretical expectations and democratic ideology?

Finally, the presentation of the analysis struck me at times as tedious and confusing, serving to conceal rather than to illuminate the important theoretical points being made. Although I found the book informative, I did not find that it offered an enjoyable reading experience.

On the Borders of Crime: Conflict Management and Criminology. By Leslie W. Kennedy. New York: Longman, 1990. Pp. xii + 153.

Robert J. Sampson

University of Illinois at Urbana-Champaign

Crime-control policy these days, especially regarding drugs, seems to be dominated by calls for ever greater law enforcement and official social control (e.g., police officers, imprisonment, the death penalty, etc.). It is refreshing to encounter a book that questions the wisdom of the assumptions underlying such policies. The book in question, by Leslie Kennedy, does so by taking a rather broad look at the management of crime and conflict. He begins in chapter 1 by reviewing various conceptions of the definition of crime and sides with a conflict-oriented position on "how conflict can shift the boundaries of what the justice system treats as crime" (p. 7). He also argues, à la Durkheim, that a certain amount of crime and conflict is inevitable. This material is fairly standard, although Kennedy's treatment does provide some useful insights and reminders. For example, he ties the idea that crime is normal to public ambivalence about formal social control (e.g., calling the police). Indeed, interpersonal disputes that are commonly resolved informally may be poorly suited to intervention by our formal system of control.

Chapter 2 surveys some of the basic perspectives on human nature and the issue of heredity versus socialization in the study of crime. It is not surprising that Kennedy rejects the constitutional argument of heredity and instead focuses on the social bases of criminal behavior. This sociological perspective is expanded further in chapter 3 where the nature of disputes and how they are handled in modern society become the major focus. Here Kennedy explores "dispute pyramids"—the vast number of encounters and disagreements that occur beneath the surface of official intervention. Drawing on material from the sociology of law, he examines factors such as naming, blaming, and claiming, and situational factors surrounding the dispute process (e.g., victim-offender relationship and audience). On the basis of his synthesis of previous literature in conjunction with brief analyses of some data from Alberta, Kennedy concludes

that dispute careers vary according to the type of conflict that is involved, and that crime-based disputes are most often between strangers (p. 45). But, according to Kennedy, the police find their way into physical disputes more often if they are between intimates rather than between strangers, even though disputes in general often take place outside the domain of police attention.

The idea that formal responses to crime can solve the basic problem is questioned more directly in chapters 4 and 5. As Kennedy argues, our "fixation" on formal responses has led us to believe that the system needs to become *more* punitive in order to deter crime (p. 55). But in fact the system may have left the informal system incapable of providing alternative solutions. Within this context, Kennedy reviews various informal social-control systems under the general umbrella of dispute or "conflict resolution." To my mind this is the most interesting part of the book. In particular, chapter 5 examines mediation as an alternative to the formal court system, the operation of neighborhood-based mediation centers, conflict management in prison, and the use of mediation to foster social cohesion in urban neighborhoods.

The logic of mediation even has an analogy in police work. Namely, Kennedy argues in chapter 6 that we need more emphasis on "community-oriented policing," the idea that the police should link up with community leaders in designing strategies of crime control (p. 100). Perhaps more crucially, community policing involves the long-term assignment of officers to a community (e.g., the neighborhood beat), and a concomitant shift away from a centralized, radio-dispatched (i.e., 911) system of after-the-fact police response. Although community policing has gained popularity in recent years, it has nonetheless met resistance from police managers. To understand this inertia Kennedy reviews the literature on styles of police behavior and the bureaucratic and organization determinants of police management.

After a brief look at plea bargaining in chapter 7, Kennedy concludes in chapter 8 with a series of propositions that he derives from his sociological perspective on societal responses to crime. The most useful of these propositions pertain to the points made above on the inadequacy of a purely formal response to crime. As he argues, official deterrence is useless unless undergirded by a solid system of informal social control. In this regard, the tendency of our system of justice to treat crime in mediative ways and yet define it in nonnegotiable terms is self-defeating at best.

All in all, Kennedy's treatment of societal responses to crime is reasonable and sound. The book is compact and highly readable and would thus make a useful supplement to an upper-level or graduate course in criminology or the sociology of law. The ideas in the book are also of interest to scholars working in the areas of conflict resolution and other alternative responses to formal social control.

Death Work: A Study of the Modern Execution Process. By Robert Johnson. Pacific Grove, Calif.: Brooks/Cole, 1990. Pp. x+174. \$15.95 (paper).

Raymond L. Schmitt
Illinois State University

Thanatologist Edwin S. Shneideman defines death work as those intrapsychic and interpersonal processes through which dying persons prepare for death. Robert Johnson, professor of justice, law, and society, reveals how, in contemporary American prisons, lengthy and orchestrated stays on death row serve to prepare for death those condemned to be legally executed. *Death Work* is about personhood; dehumanization; deep negative emotion; organizational work, power, and paradox; dying trajectories; violence; mutual pretense; dramaturgy; total institutions; and punishment theory.

Johnson relies primarily on emerging open-ended interviews to elicit the perspectives of death-row inmates, death-row officers, execution-team officers, and others, including the prison warden, in an unidentified southern state prison in order to derive his conclusions inductively. He blends these insights with findings from his earlier studies of American prisoners condemned to die. Although Johnson is to be commended for the imaginative, opportunistic, and historic aspects of *Death Work*, the core methodological directive that flows from his effort is the benefit of focusing on a designated phenomenon over a period of time. Johnson's significant, informative, and careful interpretation of the modern execution process was tremendously enhanced by his having spent about a decade studying executions and prison confinement. Those who engage in naturalistic observation have not sufficiently elaborated the unmistakable advantages of building some common, but elastic, denominators—including conceptual schemes, methodological strategies, and objects of study—into their research trajectories so that their insights are given an opportunity to evolve and mature.

Johnson demonstrates how condemned inmates, mostly males, are dehumanized through their lengthy experiences on death row. Dehumanization entailed the loss of the capacities for autonomy, security, and relatedness to others. While the death of self was gradual, somewhat resistant, and perhaps unintentional, it was, above all, organizationally mediated. The death-row inmate *was* dehumanized. The execution team, for example, dehumanizes the prisoner through the prison's execution rituals and is dehumanized in the process. Johnson occasionally uses the phrase, "the psychology of capital punishment," but, as the author himself vividly shows, dehumanization is an interactive process.

Physical and social confinement was an important contributor to dehumanization. Johnson contends that death rows are human warehouses. One condemned prisoner commented, "That's all we do; eat and defecate. Nothing else." Johnson's effort, however, entailed the study of a

reformed death row where prisoners were given meaningful freedoms, but these wards were still "nightmares." The failure of the reformed ward suggests that it is the identity of being condemned to die that is the keynote, and perhaps paramount, process in dehumanization. Condemned prisoners feel, almost to a man, that the prison staff treats them "as if already dead." Their selves died within an ocean of deep negative emotions, as autonomy shifted to powerlessness, security to fear, and relatedness to loneliness. Prisoners and staff used denial and make-believe to combat futurelessness, but the condemned men always experienced their executions as defeated men. They were already socially dead.

In the fourth and final part of *Death Work*, entitled "Moral Considerations," Johnson generates the position that the death penalty is immoral: the lengthy death-row experience in America constitutes torture rather than punishment because it violates personhood. Johnson tempers the responsibility of the murderer. The typical murderer is depicted as having experienced an atmosphere of poverty, neurological impairment, physical abuse, or inadequate diet. The death penalty does not provide the person with an opportunity to experience the consequences of punishment. Johnson states, "it is unconscionable to take the lives of individuals who might have been able, even if only in some small way, to make up for the wrongs they have caused" (p. 154). He opts for a true life sentence, that is, one with no possibility of parole, for murderers, noting also that a humane death row would enormously complicate the business of death work.

Johnson's attempt to decipher an existential dilemma through empirical evidence is courageous, but some, of course, will contest his stance. Are there two images of human nature in Johnson's work? Murderers are portrayed as passive recipients of their environment, yet they possess an active capacity for self-determination through true life sentences. It is noted in the foreword that Johnson has witnessed a legal execution. There is no indication, however, that Johnson ever attempted to observe a criminal act of murder or the suffering of the loved ones of those who have been murdered. Can the sociological and moralist interplay between death-row experiences and the justice of the death penalty be adequately assessed without comparable attention to the perspectives and feelings of the victims' emotional associates? They, too, have death work to do. Perhaps, Johnson should now extend his circumspect analysis of capital punishment into the life worlds of murder's victims.

Convict Workers: Reinterpreting Australia's Past. Edited by Stephen Nicholas. New York: Cambridge University Press, 1989. Pp. ix + 246. \$44.50.

Philip McMichael
Cornell University

Convict Workers represents the third cycle of revisionist history regarding the role of convictism in Australian colonial history. But it is a cycle with

a difference. Whereas previous revisions were concerned with whether convictism tainted white Australia's origins, this revision pursues a radically different task—that of documenting, and so elevating, the contribution made by convict labor to the new colony's economy and society. Indeed, the overall perspective is one of emphasizing the exceptional characteristics of convicts as "migrant workers." The empirical documentation of the superior health, standard of living, education, skills, and unusually young demographic profile of the convicts vis-à-vis English workers presents an almost ideal-typical social labor force. This of course emerges inevitably from the revisionist goals of the study, which was carefully nurtured as a collective, six-person endeavor and published to coincide with Australia's 1988 bicentennial.

The book addresses three principal themes: the global context of convict transportation, the proletarian rather than the criminal qualities of the convicts, and the general efficacy of the convict-labor system. It challenges the romantic view of convictism with an empirical and comparative assessment of the "human capital" qualities of colonial Australia's first labor force. There is a double take here. On the one hand, the comparative data support an exceptionalism in the select character of the labor force and labor market. On the other, however, the authors challenge the exceptionalist view of convict transportation as unique to 19th-century Australia.

Taking the themes in turn, I find that the first is perhaps the least developed. This theme has two aspects—the one contextual and the other compositional. Detailing the widespread use of convict labor within the 19th-century British empire, in addition to the use of forced Russian labor in Siberia and bonded Asian-Pacific labor, the authors maintain these labor systems complemented free European migration. Convictism was a global phenomenon, representing a "half-way stage between a slave and free labor system," according to Stephen Nicholas and Peter Shergold (p. 38). A later chapter on the compositional features of the convict-labor market focuses this question of the conceptual status of convict labor. It challenges the assumptions of "unfreedom" and inefficiency underlying arguments that convict labor was noncapitalist. Empirical tests suggest that they are untenable when analyzed in the context of convict-labor distribution and the work process. While the exercise establishes that the free and "assigned" labor markets successfully conditioned one another, it avoids the fundamental conceptual point that this is how historical capitalism works. Not only was the 19th-century global economy one in which various forms of labor (including slaves) formed a value-producing unity governed by wage labor, but, in addition, labor markets were precisely the constructs of states participating in this global economy.

The second theme challenges the common belief that convicts derived from a British criminal class. It accomplishes this goal largely through statistical profiles constructed from computerized data obtained from a sampling of indents of 19,711 convicts transported to New South Wales

between 1817 and 1840. The profiles have two aspects. The first concerns the sociogeographic origins of the convicts. Noteworthy here is (a) a fine chapter by Deborah Oxley on the structural conditions that produced female crime, challenging the behaviorist assumptions of, among others, the celebrated Australian historian Manning Clark regarding the criminal predispositions of the convicts and (b) a somewhat specious argument by Nicholas and Shergold concerning the relative adaptability of these people to transportation, given that many of them had already migrated across English counties "to maximize the economic returns on their investment in education and training and not to engage in criminal activity" (p. 60). This leads into the second aspect, which demonstrates the convicts' relatively high skill levels and their representativeness vis-à-vis the skill divisions in the British proletariat.

The efficacy of the convict-labor system is the third major theme, and here the authors provide a valuable service in evaluating and reconstructing the workings of the convict-labor market, the state's role in organizing labor, the organization of public and private work, and the relative standard of living of the convicts. An early chapter by David Meredith summarizes the process by which convictism shifted from being a method of labor supply in the short run to being a long-term obstacle to a supply of wage labor in colonial Australia. The principle issues are that the convict-employment system was regulated effectively by the state, complementing the private sector and applying the various skills of the convicts to the colony's and the convicts' advantage. Related to this is the revisionist, but unsurprising, evaluation of the convicts' relatively well-off condition as workers compared with wage laborers in England. This parallels the debate over the comparative condition of slave labor in the United States at the same time—a time in which the depredations of the "free" labor market were lowering the living standards of the early proletariat.

In conclusion, the strength of this study is its sustained empirical analysis of convictism in early Australia—in particular the provision of the data supporting a perspective on convictism as a global class solution to capitalist transition in Britain. Its weakness may prove to be just what Nicholas anticipates, in his claim that traditional historians "asked the wrong questions and neglected the data on the convicts' occupations, literacy and height . . . our new view is a captive of our economic questions, quantitative data and statistical techniques" (p. 201). Quite—this kind of study sacrifices the cultural and political dimensions of convictism in order to accentuate the unexceptional operation of the convict-labor system. One wonders, for instance, about the status of those poignant songs composed by transported folk in the light of this discounting of the social trauma of transportation by focusing on the propensities for individual improvement in convicts' biographies—both in job seeking in Britain, and in increasingly viewing the colonies as a "soft landing," because of the relatively good conditions there.

Fertility Change on the American Frontier: Adaptation and Innovation. By Lee L. Bean, Geraldine P. Mineau, and Douglas L. Anderton. Berkeley and Los Angeles: University of California Press, 1990. Pp. xiii + 295. \$40.00.

David I. Kertzer
Bowdoin College

Taking advantage of the world's largest collection of nominative genealogical records, collected by the Church of the Latter-Day Saints, researchers working on a variety of biomedical and demographic topics have been able to construct massive historical demographic data files. *Fertility Change on the American Frontier*, one of the major projects to stem from this work, uses this unusual longitudinal data to evaluate theories in historical fertility research. The authors examine the records of 185,000 families, focusing on childbearing women born during the 19th century who were part of the movement to develop Utah.

As the book's subtitle suggests, the organizing theoretical framework is provided by the debate over how fertility decline took hold in western populations of the past. The authors use the Utah data base to argue against the diffusionist view, which sees conscious birth control as a recent invention that moved into the population through the middle and upper classes and then filtered down to the lower classes and out from urban areas to the hinterland. Instead, they argue that primitive forms of conscious birth control had long been practiced by these populations and that all subpopulations began to experience the fertility decline simultaneously.

Central to the first part of their argument is the claim that birth-spacing efforts were attempted even in the earliest period. Unlike aggregate-level historical studies, such as the well-known Princeton European Fertility Project, the Utah study allows the investigations to examine birth spacing and birth stopping directly. What they find is clear evidence that spacing played a major part in efforts to limit births, a proposition that goes against much received (but not unchallenged) wisdom in the field.

Both the strengths and weaknesses of this book are closely bound to those of the unusual data base the authors have compiled. Their intent is to use this case to test general theory, not to provide a study of a historically particular population (the Mormons). The rich longitudinal data allow them to examine fertility behavior at a level of detail not ordinarily available outside of locality-based studies that are heavily biased owing to population loss through migration. However, although the data are rich, they have some important limitations; moreover, the population has some unusual characteristics that raise questions of generalizability.

Since no data are available on class or occupation, there are problems in organizing this study around a testing of diffusionist theories. The diffusionist theory is, in one of its major formulations, a theory of class relations: birth control begins among the middle or upper classes and then filters down to the working and lower classes. Without any occupational data, Bean, Mineau, and Anderton do not disprove this theory. They argue that "small clusters of seemingly highly motivated couples achieved limited numbers of children" (p. 245), yet they cannot tell us whether these pioneers came from certain economic groups.

The other principal component of the diffusion theory involves the slow movement of birth control from major urban centers to isolated rural areas. Here again, whether the Mormon population of Utah can be seen as a good test case is not obvious. As the authors of this volume suggest, the Mormon church created a highly integrated society, with less social distance between urban and rural dwellers than elsewhere. In such a context, the fact that behavior change occurs with greater simultaneity in urban and rural areas is less surprising.

The authors point to a rise in fertility that came as the first cohorts were replaced by middle cohorts in the 19th century. In this analysis, they make much of the fact that those immigrant women who bore their last child in Utah had more children (and bore their last child at a later age) than immigrants who had borne their last child before reaching Utah. Yet, it would be useful to know to what extent this effect is simply due to selection bias. For example, take the hypothetical case of two 38-year-old women who left England together. If one then gave birth in Utah (at age 42) and one did not, this would erroneously be taken as evidence for a frontier effect stimulating higher fertility.

The authors take pains to show that the peculiarities of the Mormon population do not vitiate its use as a test case for theories of fertility behavior. They show, for example, that, although the Mormons had higher fertility than the non-Mormon population of Utah, the fertility decline began around the same time in both populations. Perhaps this desire to see the Mormons as representative led to an underplaying of their most historically notable demographic behavior, polygyny. Although some demographic analysis of polygynous women is provided, we are given none of the context that would allow us to understand what polygyny actually meant for families.

Fertility Change on the American Frontier is a lucid and provocative book, and a report on perhaps the most ambitious historical demographic study ever attempted in the United States. Although the book is not entirely convincing as a refutation of diffusionist theories of fertility decline, it has many virtues. In particular, the evidence it adduces of the early use of birth spacing as a means of birth control not only challenges current theory in historical demography but also casts doubt on the validity of some of the foremost statistical methods used to examine "natural" fertility and the fertility decline. Thanks to the work of Bean, Mineau, and Anderton, historical demographers in the future will have to grapple

with the Mormon case as they formulate their theories of the nature and causes of fertility decline in the West.

Pregnancy, Contraception, and Family Planning Services in Industrialized Countries. By Elise F. Jones, Jacqueline Darroch Forrest, Stanley K. Henshaw, Jane Silverman, and Aida Torres. New Haven, Conn.: Yale University Press, 1989. Pp. x+276. \$30.00.

Krishnan Namboodiri
Ohio State University

Organized in two parts, this monograph reports a cross-national comparative study of factors affecting prevalence of contraceptive practice, incidence of unplanned pregnancies, and fertility rates. First, a brief comparative analysis of 20 industrialized countries (Australia, Austria, Belgium, Canada, Denmark, Finland, France, Federal Republic of Germany, Greece, Ireland, Italy, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Great Britain, and the United States) is presented. Then the experiences of the United States, the Netherlands, Great Britain, and two provinces in Canada (Ontario and Quebec) are examined more closely.

The data examined are mostly for the period 1982–86, although some data go back to 1975. A simple causal model is said to have guided the analyses. In the model, “laws and policies,” “service delivery,” and “information delivery” are the independent variables, contraceptive use is the intermediate variable, and fertility, unintended pregnancy, and abortion are the ultimate dependent variables.

The overview analysis involving 20 countries is reported in chapters 2 and 3. The dependent variables and the intermediate variable (contraceptive use) receive attention in chapter 2, and the independent variables (the so-called institutional factors—laws and policies, service delivery, and information delivery) and their effects on the intermediate variable are examined in chapter 3. Chapter 4 introduces the case studies, and chapters 5–8 contain reports on the experiences of the United States, Ontario and Quebec, the Netherlands, and Great Britain, in that order. The final chapter highlights the conclusions of the study.

The secondary data used in the overview analyses of chapter 2 are reproduced in appendix B with their sources listed in appendix A. The categorical data regarding laws and policies, service delivery, and information delivery are presented in appendix C. A questionnaire used in a country-level survey to obtain primary data for the study on the main features of the family-planning services is reproduced in appendix D.

The study points out that the total abortion rate and pregnancy rate are higher in the United States than in most of the other countries examined. Abortion rate is high in the United States because the use of effective contraception is correspondingly low. Family-planning clinics, widely

used in other countries, are stigmatized in the United States, where they are perceived as serving primarily the poor and offering lower-quality services. Also, in the United States, the usual source of contraceptive service is specialist physicians, primarily obstetricians and gynecologists. This is in sharp contrast to most other countries, where general or family practitioners are the usual source of primary health care, including contraceptive services. The advantage of having general and family practitioners provide contraceptive service is that the service provider is relatively more easily accessible to those in need and the long-standing nature of the relationship between the provider and receiver make the delivery of information and service more effective.

In sum, how family planning services are provided seems to have a substantial impact on the pattern of contraceptive practice. The service-delivery system in the United States is different from other Western countries' ways that make it less conducive, on the whole, to the use of modern, high effective methods of contraception. In addition, readily available information about contraceptive methods and services is lacking in the United States, especially simple, objective materials in the mass media. The high U.S. incidence of abortion and unplanned births can be attributed at least partially to these circumstances. [P. 224]

Among the features that make this monograph a useful addition to the literature are that (1) it assembles comparative data for a number of countries on unintended conceptions and (2) it focuses on the causal role in fertility control of law and policy and the delivery of services and information.

One feature that gives me concern is that from aggregate-level relationships inferences about causal mechanisms operating at the individual level are drawn without any hesitation. For example, the negative association between abortion rate and proportion of women relying on most effective methods (IUD, the pill, sterilization) is interpreted to imply that "Evidently the determination to limit childbearing is deeply entrenched in modern, developed societies, and women often resort to abortion if an unintended pregnancy occurs" (p. 218). Studies that claim to be policy relevant must give closer attention to the causal mechanisms that link relationships that operate at different levels of aggregation.

Family, Political Economy, and Demographic Change: The Transformation of Life in Casalecchio, Italy, 1861-1921. By David I. Kertzer and Dennis P. Hogan. Madison: University of Wisconsin Press, 1989. Pp. 270. \$19.50 (paper).

Peter Laslett
University of Cambridge

Sociologists must now be accustomed to the inroads that historical study has been making into accepted dogma about the development of Western

social structure for 20 years. Gone is the principle of the nuclearization of the European family with industrialization. Gone is the supposition that the rural communities of that continent were all characterized by the immobility of their populations, by levels of anomalous procreative and sexual behavior much lower than the urban areas, by kinship connection and kinship control being much stronger and more reliable than it has since become. With the appearance of David Kertzer and Dennis Hogan's outstanding monograph, *Family, Political Economy, and Demographic Change*, all these revisions and many others are confirmed and one more is suggested, that the coming of the factory did not necessarily victimize children to the extent that has been believed.

This is a book of superior scholarship, superior in its research techniques to any other of its kind that has so far appeared, and written with clarity and sobriety. It is the first monograph on the development of a particular community undergoing industrialization to draw on a data base designed and maintained at the highest contemporary standard, one that is replete with files of information that are perhaps unique in their extent and informativeness. It cannot be expected to make the nationwide or even Europe-wide generalizations contained in the collective volumes of the 1970s and 1980s that brought about the revisionary movement (e.g., P. Laslett and R. Wall, *Household and Family in Past Time* [Cambridge: Cambridge University Press, 1972]). Nevertheless, it gives many of the propositions in these books a more precise form, corrects mistakes, and makes approaches to a newer theory of the social transformation that comes with "modernization," an expression that the authors use with commendable caution. They can, and do, give much wider application to their findings by comparing Casalecchio's figures with those of the Italian nation as a whole.

There are further reasons why they can make persuasive statements about a whole social order and its development. The community they study occupies a strategic position in the transition that interests them. Casalecchio was a village dominated by sharecropping situated a mile or two away from the large urban area of Bologna, in that part of Italy where a high proportion of households were complex in form, usually with two or even more coresident married couples and their families, until well into the present century, indeed right up to the time when Italy became an industrial power. Milan, it must be remembered, still has a proportion of extended households well in excess of any other great European manufacturing, service, and commercial center (M. Barbagli, *Sotto lo stesso tetto* [Bologna: El Mulino, 1984]). Into this not-yet-suburban agrarian community in 1856 came a hemp factory, the largest textile factory in that area of the country, which was powered first by water and was a large-scale institution resembling those that Tamara Hareven's research has made classic for the industrialization of America.

The effect of this eruption was not to disrupt the shareholding economy or to reduce the size and complexity of households. These remained unchanged for decades although the relative proportion of sharecroppers

declined as the whole economy expanded. Other segments of the population provided the manpower or the woman and child power that the factory needed, and there was some immigration. But this did not raise the level of population movement and population turnover, which was already high, as high perhaps as elsewhere in the traditional European economy. In fact, population movement went down throughout the period, just as it had gone down in Bethnal Green in London in the century before Young and Wilmott made their famous study of that area, which, by the 1950s, had settled down as a working-class community static in a way no previous society had been (as Martin Clarke, of the Cambridge Group for the History of Population and Social Structure, states in his forthcoming book). As for the once universally accepted disintegrative effect on families and the relationship of children with their parents and siblings, Kertzer and Hogan conclude thus: "Far from tearing children away from a nurturing parental family environment, industrialization often permitted them to grow up in their own family household to an extent that would not have otherwise been possible" (p. 113).

These are only one or two of the many available results in this small-sized book, which is packed with interesting outcomes. In spite of its brevity, it offers a wide-ranging and critical account of the circumambient economy, social upheaval, and political vicissitude, that both illuminates the subject and constitutes a history in itself. Naturally not all the authors' conclusions are equally convincing to a student of the European social structure, and I feel disposed to reserve my own position on the so-called European marriage pattern, while acknowledging that statements made about the Mediterranean area of European micro social structure made by me in the early 1980s will have to be revised. In general, however, these two authors have claimed too little for their book and their concluding chapter is much too brief. They should have gone further and been bolder: there is still time for theory building. Nevertheless, this is an extremely valuable book that will establish itself on large numbers of reading lists and inform the research of many scholars in historical sociology.

Older Adult Friendship: Structure and Process. Edited by Rebecca G. Adams and Rosemary Blieszner. Newbury Park, Calif.: Sage Publications, 1989. Pp. 268. \$17.95 (paper).

Gettin' Some Age on Me: Social Organization of Older People in a Rural American Community. By John van Willigen. Lexington: University Press of Kentucky, 1989. Pp. xii + 188. \$22.00.

Christine L. Fry
Loyola University of Chicago

Documenting the social worlds of older people is a central goal of social gerontology. Both of these volumes innovatively explore aspects and con-

texts of these social worlds. John van Willigen, using social network analysis, charts the social linkages of older adults in a rural Kentucky county. Rebecca G. Adams and Rosemary Blieszner have assembled a team of experts to consider one kind of social linkage in old age, that of friendship.

Friendship is very important in the lives of adults, including those who are older. Yet, studies of friends have been baffled because we do not know whom to include in the category "friend." *Older Adult Friendship* will become a major work in the study of this informal, highly personal, but conceptually ambiguous dimension of social life. Although the volume is edited, its editors have done an admirable job of integrating the 11 chapters that make up the book. Contributors are social psychologists and sociologists who provide a psychosocial perspective on the structure and process of friendship.

The book is organized into five parts. The first and last integrate the volume by examining conceptual and methodological issues in studies of friendship (R. Adams) as well as charting a future research agenda (R. Blieszner). At the core of the book are concerns about the structure and development of friendships, friendship as a social process, and the effects of social status on friendship.

Friendship, in spite of lacking boundedness as a social category, is a relationship that has a structure. Allan and Adams consider how structural conditions (e.g., retirement, widowhood, health) shape friendship in old age. Eugene Litwak looks at the forms of friendships as patterned by duration, tasks, and differential importance by life stage. Because friends are primarily voluntary, they must be recruited and cultivated. Tesch reviews studies of early life development and the effect on later friendships. Most of the processes of friendships (initiating, maintaining, and dissolving) are similar irrespective of age, but predictably some constraints are concomitant with increased age (R. Blieszner).

What do friends do? Clearly they are a source of support, although governed by different norms from familial support (S. Crohan and T. Antonucci). Friends are involved in an exchange that raises questions of equity and reciprocity in maintaining the relationship. Equity promotes the relationship, but inequities produce both negative and positive reactions depending on the perspectives of the actors (K. Roberto). Strains on friendships come from many sources (K. Rook) but certainly are not exclusive to old age. In old age, however, having friends can be seen as promoting higher levels of well-being than support from and contact with family members.

Do birds of a feather flock together? Paul Wright reports on cross-gender friendships. Dispositional and structural factors combine to favor gender homogeneous friendships that intensify in old age. What about birds that do not want to flock? Carl Cohen presents results from this study of older homeless men that refute the stereotype of isolation. These men do have contacts, but the middle-class definitions of friendship are not relevant to the different meanings and exchanges in the relationships.

In *Gettin' Some Age on Me*, anthropologist John van Willigen avoids some of the problems with labeling the kinds of linkages. His is an empirical study of a little-known environment for aging, that of a rural community. In exploring this context, he uses a multimethod research strategy of qualitative data collection (participant observation, key informant interviewing, and archival research) and quantitative techniques (a social-network interview). Social linkages of his 139 older adults are elicited using frequency (daily to monthly) as a criterion for including an ego's alters in the network. More important, he recorded the active network, which allowed for multiple classifications of the social relationships. For instance, selected family members could also be friends, as is the pattern in the working class.

A real strength of this study is the multiple windows we have on the context in which the networks of these older people are anchored. Economic, demographic, and social changes in this county of the Outer Bluegrass ridgelands of Kentucky are documented since the turn of the century. Against this rich ethnographic background, the author interprets the structure and the exchanges within social networks. Network size increases in the late 1960s and then decreases. Networks have a core and a periphery. As they increase in size, the periphery expands with more instrumental, short-duration, and lower-frequency relationships. Exchanges within the networks reveal that those with the larger networks perceived themselves as giving more, while those with the smaller networks perceived themselves as receiving more. This means the oldest age strata reported themselves more as receivers than givers. Females also reported more kinds of relationships than males.

Perhaps the most challenging part of *Gettin' Some Age on Me* is the attempt to compare the Kentucky results with other studies examining social networks among older people. Unfortunately those studies are of older adults in urbanized settings who are aging at the margins—namely single-room-occupancy dwellers. As in Cohen's study (above), these networks are truncated. Nevertheless, van Willigen notes the contrast and turns to an interpretation of social lives in the context of processes of change in rural Kentucky. He does not arrive at an oversimplistic view of urban and rural residence.

Major processes accounting for the transformation of social life in rural Kentucky are the intensification of agriculture and the penetration of the market economy to local levels that become delocalized and subject to increased regulation. Population declines as the young seek industrial work elsewhere. Wealth increases, and its centralization is disruptive of earlier egalitarian relations evident in the sharing of agricultural tasks and labor. These changes alter the structural conditions on which people base their social networks. The implications for these networks is that the density is on the decline. Although van Willigen captures the processes of change, one can quibble with his interpretation of the costs and benefits of those changes on the quality of life for older adults. One can also

question to what extent informants romanticized the egalitarian past as a time when life was better.

These two books are very different. *Older Adult Friendship* is a review of where we stand in the study of one kind of social linkage. It will prove to be a very useful resource for those studying friendships of adults and of older adults. *Gettin' Some Age on Me* is an empirical study of social networks of older people. In it, new ground is broken conceptually, methodologically, and ethnographically. It will become one of the standards in the study of social-network analysis.

Pipe, Bible, and Peyote among the Oglala Lakota: A Study in Religious Identity. By Paul B. Steinmetz. Knoxville: University of Tennessee Press, 1990. Pp. xiii + 237. \$29.95.

J.D.Y. Peel
University of London

The author of this revised edition of a work first published in Stockholm in 1980 is not a social scientist but a remarkable Jesuit priest. Father Steinmetz here analyzes the religious life of a people—a branch of the Sioux living in the Pine Ridge Reservation of South Dakota—whom he ministered to for two decades. His personal engagement with the Lakota and his analytical method—the phenomenology of religion—carry both benefits and costs for his analysis.

Steinmetz is concerned with the interaction of the three traditions that shaped Lakota religious life and are encapsulated in three core symbols: the sacred Pipe of the indigenous Lakota religion; the Peyote, introduced around 1904 in the pan-Native American movement of cultural revitalization; and the Bible. Over half the book is devoted to a description of traditional beliefs and ceremonies in their contemporary form and of the Peyotist tradition manifest in the Native American church. Steinmetz's knowledge is clearly intimate and is backed by detailed verbatim narratives and exegeses, songs, reports of visions or dreams, and so forth, from Lakota informants. Some of his own involvements with the Lakota, for example, his adoption of the use of the Pipe in prayer and the thanksgiving meetings that were held for him, are also described.

Lakota religion in its actuality is both plural and syncretist. Steinmetz uses the three core symbols to define a religious field in which he locates some six groupings that exemplify different ways in which the symbols may be combined or rejected: the American Indian Movement (Pipe only, anti-Christian), the pentecostalist Body of Christ church (Bible only), two branches of the Native American church (Bible with Peyote, one also with Pipe), and two tendencies among ordinary Lakota Christians (Bible with Pipe; one that is more synthesizing and the other that com-

partmentalizes them). On the assumption that "the ultimate source of personal identity is religious" (p. 5), Steinmetz treats these six groupings as options for the definition of Lakota identity in general.

It is at this point that the rather determinedly unsociological, even "superstructural" character of the study begins to tell. Though a phenomenologist is understandably opposed to any Marxist or Durkheimian reduction of religion to some "real" social base, there is a great deal more that we could have learned about the social context. Apart from a few passing details, society on the Pine Ridge Reservation is left largely undescribed; we do not learn what work people do, who has power, what conflict is about, or even what proportions or kinds of people are inclined to the various religious identity options. (Numbers are not everything, but I was surprised to read that only 7.5% had attended Peyote meetings and less than 1% claimed primary membership in the Native American church.)

But Steinmetz seeks another kind of significance in his material. On the basis of Mircea Eliade's work, he argues that symbols in "primal" religions not only point to "meta-empirical realities" but adumbrate higher (i.e., more universal and transcendent) religious forms. This view enabled him, *as a Catholic priest*, to pray with the Pipe (the traditional symbol of mediation with the Great Spirit). To the charge of "religious imperialism," he replies that in making the Pipe "a sacramental sign of Christ" he did not seek to suppress the Lakota religion but to recognize its validity (p. 179). His countercharge to his anthropological critics is that they ignore the extent to which Christianity is now a part of the Lakotas' religion, as well as the fact that it was the Lakotas, and particularly some of their medicine men, rather than the missionaries, who first saw indigenous symbols as prefiguring Christian ones. (He gives a cogent analysis of the famous Ghost Dance vision of Black Elk, with its Christian content at first unacknowledged but later reinterpreted, with hindsight, as a prefiguration.) Although these claims seem justified in relation to present realities—certainly close parallels can often be found in, say, African Christianity—the teleology implied in the notion of Christianity as the "maturity" of Lakota religion is worse than unhelpful when it comes to explanation. For the potentiality that Steinmetz sees as latent in Lakota religion has as a condition of its realization the hegemony of Christian religious discourse; and that, of course, depended on the power relations between the Lakota and the white American society into which they were incorporated.

This is a study of value and integrity, but it has definite limits. What is clear is that the phenomenology needs the sociology of religion to make it complete.

Ethnic Identity

The Transformation of White America

Richard D. Alba

Using data from in-depth interviews with more than five hundred people, Richard D. Alba examines the changing role of ethnicity in the lives of Americans from a broad range of European backgrounds.

"A major work on the dynamics and complexities of ethnic collectivities in American society." —Robert K. Merton \$35.00

Two Worlds of Judaism

The Israeli and American Experiences

Charles S. Liebman and
Steven M. Cohen

"A brilliant analysis of the Israeli and American Jewish experiences, *Two Worlds of Judaism* is filled with penetrating and often dazzling insights. It is indispensable to anyone who wants to understand the nature of American and/or Israeli Judaism, as well as the complex relations between them." —Charles Silberman \$25.00

The AIDS Disaster

The Failure of Organizations in New York and the Nation

Charles Perrow and Mauro Guillén

A passionate, well-documented indictment of both governmental and private groups for their failure to respond to the AIDS crisis. Basing their study largely on America's hardest-hit city, New York, Charles Perrow and Mauro Guillén describe how society's aversion to homosexuals and the urban poor affected the reactions of specific organizations in dealing with AIDS. *A Yale Fastback*, new in cloth (\$25.00) and paper (\$9.95)

Now available in paperback

Deceptive Distinctions

Sex, Gender, and the Social Order

Cynthia Fuchs Epstein

A leading feminist scholar shows how distinctions between the sexes are maintained by ideology and social controls.

"A model of sociological common sense.... This is truly the capstone of a mature scholar." —Janet Saltzman Chafetz, *Social Forces* \$13.95 Co-published with the Russell Sage Foundation

Spouse, Parent, Worker

On Gender and Multiple Roles

edited by Faye J. Crosby

"A useful and revealing contribution to our understanding of the major role that work, in combination with marriage and parenthood, plays in the satisfaction of adults." —Linda C. Majka, *American Journal of Sociology* \$10.95

Crimes of Obedience

Toward a Social Psychology of Authority and Responsibility

Herbert C. Kelman and
V. Lee Hamilton

"A major contribution to the social psychology of social movements." —William A. Gamson, *American Journal of Sociology*

"A patently original, socially compelling, thoroughly scholarly dissection of actions in response to commands by authorities." —Leonard W. Doob, *Key Reporter* \$14.95

Yale University Press

Dept. 493, 92A Yale Station
New Haven, CT 06520



Harvard

Foundations of Social Theory

James S. Coleman



"The most important book in social theory in a long time. Coleman demonstrates formally and with numerous examples that a rational choice model of behavior has enormous power in explaining social phenomena. This book will give sociology a strong push in a new direction."

—Gary S. Becker

"[This work] is truly a major contribution. The publication is a most significant event in the social sciences, in sociology, perhaps the most important since the publication of Talcott Parsons' *The Structure of Social Action* more than fifty years ago. *Foundations of Social Theory* represents a rare combination of theoretical power and precision, sociological imagination, and important ideas about the nature of modern society. It is a combination that now is unique in sociology."

—Aage B. Sørensen,
Harvard University

The Belknap Press \$39.50 cloth

Fierce Communion

Family and Community in
Early America

Helena M. Wall

Using local town, church, and especially court records from every colony, Helena Wall examines the division of authority between family and community throughout colonial America. She shows what life was like in a culture where individuals and family were subordinated to the demands of the community and she sketches the changes in this relationship as the colonies moved toward the formation of a new nation.

Harvard Historical Studies, 106

\$29.95 cloth

The Power of Public Ideas

Edited by Robert B. Reich

Edited and contributed to by one of America's most respected political and economic thinkers, and containing essays by an impressive roster of experts, *The Power of Public Ideas* offers a controversial, timely, and incisive analysis of the impact of the public interest on governmental policy making.

"This is easily one of the best [books] of its kind to be published in the last decade or so."

—*Journal of Policy Analysis and Management*

\$11.95 paper

Harvard

The Limits of Social Policy

Nathan Glazer

"[This] is a book about the policy process itself, about the necessary shortcomings of grand proposals and the influences on policy. And, characteristically for Mr. Glazer, it is pragmatic, thorough and evenhanded. *The Limits of Social Policy* will be discouraging reading for all those people—liberal, moderate or even conservative—who fondly believe that it is possible to devise and implement a national social policy that will sharply reduce poverty and distress. That is precisely why they should read it."

—Stuart Butler, *Wall Street Journal*
\$10.95 paper

Genethics

The Clash between the New Genetics and Human Values

Revised and Updated Edition

David Suzuki and

Peter Knudtson

"An excellent bridge between the science of genetics and public policy, between empirical science and ethics, and between how we think about genes and how we think about persons. I found the book provocative, informative and satisfying [and] its balance is felt throughout."

—Sheldon Krinsky,
Tufts University
\$12.95 paper

Elites and the Idea of Equality

A Comparison of Japan, Sweden, and the United States

Sidney Verba and Steven Kelman,

Gary R. Orren, Ichiro Miyake, Joji

Watanuki, Ikuo Kabashima, and

G. Donald Ferree, Jr.

"This is a consistently interesting and useful study, whose exposition, moreover, is exceptionally clear and coherent. It contributes importantly to our general understanding of conflicts over equality in the politics of advanced democracies."

—*American Journal of Sociology*
\$12.95 paper

Women's Quest for Economic Equality

Victor R. Fuchs

"Fuchs' book is an important contribution to a critical discussion; he sorts out the various factors which lead to gender inequality in economic life, and highlights the central place of childrearing. Any reader will be enlightened by his careful analysis and stimulated by his concrete policy proposals."

—Naneri O. Keohane,
President, Wellesley College
\$8.95 paper

**Harvard
University
Press**

Cambridge, MA 02138
(617) 495-2480

STUDIES IN SOCIAL PROBLEMS FROM CHICAGO



Streetwise

Race, Class, and Change in an Urban Community

Elijah Anderson

"Elijah Anderson's *Streetwise* is both timely and classic. . . . Anderson's treatment of lifestyles associated with the ghetto underclass stands with William Julius Wilson's *The Truly Disadvantaged* as a landmark of socially relevant scholarship."—James F. Short, Washington State University

*Cloth \$19.95 288 pages
1 frontispiece, 2 tables*

Now in Paper

The Truly Disadvantaged

The Inner City, the Underclass, and Public Policy

William Julius Wilson

"This book is a major statement on public policy and race relations in the United States, and it will be widely influential in shaping the discourse about that policy. . . . Because of the controversy it is sure to stir, we are in Wilson's debt for helping to rekindle a debate that should have been taking place the last two decades."—Troy Duster, *Contemporary Sociology*

*Paper \$12.95 266 pages 13 figures,
17 tables*

Winner of the C. Wright Mills Award of the Society for the Study of Social Problems

Drugs and Crime

**Edited by Michael Tonry and
James Q. Wilson**

In this systematic review of the relationships between drug use and crime, ten essays analyze the relative effectiveness of various strategies to curb this widespread problem.

Cloth \$39.95 608 pages

Crime and Justice: An Annual Review of Research, Volume 13



Punishment and Modern Society

A Study in Social Theory
David Garland

Garland's pathbreaking book explores all aspects of the penal system, reopening basic questions about the social foundations of punishment in order to determine its functions and effects. "An outstanding work, informed by brilliant scholarship."

—Sheldon L. Messinger, University of California, Berkeley

Cloth \$29.95 320 pages

The Limits of Rationality

Edited by Karen Schwears
Cook and Margaret Levi

Collecting work by leading researchers, this accessible introduction to rational choice theory explores the limits of the paradigm and the nature of current controversies, and suggests improvements for current models.

Paper \$19.95 438 pages

Library cloth edition \$49.95

World Population Growth and Aging

Demographic Trends in the Late Twentieth Century

Nathan Keyfitz and
Wilhelm Fleiger

Covering more than 150 countries from 1950 onward—with projections through 2020—this compendium of statistical information on population, fertility, and mortality is an ideal resource for analyzing worldwide demographic changes.

Cloth \$65.00 608 pages (est.)

800 figures, tables throughout



Now in Paper

A Crime of Self-Defense

Bernhard Goetz and the Law on Trial

George P. Fletcher

"In the course of telling an exciting story, Fletcher gives us a dazzling lesson in criminal law. The book is virtually a law school education in itself"—Jack Greenberg, former director-counsel, NAACP Legal Defense and Educational Fund

Paper \$12.95 272 pages

Winner of the 1989 Silver Gavel Award of the American Bar Association

The University of Chicago Press

5801 South Ellis Chicago, IL 60637

At bookstores, or call: 1-800-621-2736.

In Illinois: 312-568-1550

SOCIAL PROBLEMS

SPECIAL ISSUES

FIVE PAPERS ON AIDS, Volume 36:4 (October 1989)

LANGUAGE, INTERACTION AND SOCIAL PROBLEMS,
Volume 35:4 (October 1988)

SPECIAL THEORY ISSUE, Volume 33:6 (December 1986)

FEMINIST ISSUES AND WOMEN'S PROBLEMS, Volume
32:4 (April 1985)

THEMATIC ISSUE ON THE FAMILY, Volume 31:3
(February 1984)

THEMATIC ISSUE ON JUSTICE, Volume 30:5 (June 1983)

**THEMATIC ISSUE: TECHNIQUE AND THE CONDUCT
OF LIFE**, Volume 30:3 (February 1983)

THEMATIC ISSUE ON HEALTH AND ILLNESS, Volume
30:1 (October 1982)

\$16.50 per Issue; 30% off to members.

**PUBLISHED BY THE UNIVERSITY OF CALIFORNIA PRESS
FOR THE SOCIETY FOR THE STUDY OF SOCIAL PROBLEMS**

For subscription/membership information, contact:
University of California Press Journals
2120 Berkeley Way
Berkeley, California 94720

Human Studies

A Journal for Philosophy and the Social Sciences

Editor

George Psathas, *Dept. of Sociology, Boston University, USA*

Human Studies is devoted primarily to advancing the dialogue between philosophy and the human sciences. In particular, such issues as the logic of inquiry, methodology, epistemology and foundational issues in the human sciences exemplified by original empirical, theoretical and philosophical investigations are addressed. Phenomenological perspectives, broadly defined, are a primary, though not an exclusive focus.

Human Studies is attractive to scholars in a variety of fields, since it provides a forum for those who address these issues in attempting to bridge the gap between philosophy and the human sciences. The contributions published have been drawn from sociology, psychology, anthropology, history, geography, linguistics, semiotics, ethnomethodology, political science and, of course, philosophy.

Human Studies is partially supported by the Department of Sociology, Boston University, Boston, Massachusetts.

Subscription Information ISSN 0163-8548
1990, Volume 13 (4 issues)
Institutional rate: Dfl.220.00/US\$103.00
Incl. postage/handling
Private rate: Dfl.100.00/US\$ 48.00
incl. postage/handling

Private subscriptions should be sent direct to the publishers

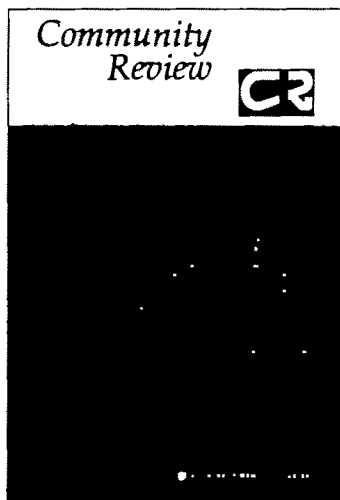
P.O. Box 322, 3300 AH Dordrecht, The Netherlands
P.O. Box 358, Accord Station, Hingham, MA 02018-0358, U.S.A.

**Journal
Highlight**

**KLUWER
ACADEMIC
PUBLISHERS**



Community Review



Kenneth Peeples, editor
*LaGuardia Community College,
City University of New York*

A forum for the exchange of professional concerns and interests within the two-year college community. A wide range of topics is covered, including experimental programs, curriculum development, population makeup, and student counseling.

Feature articles include:

An Interview with Chinua Achebe
Walusako Mwalitino
Beyond E.D. Hirsch and Cultural Literacy: Thinking Skills for Cultural Awareness
Louise R. Giddings
Down the Up Staircase: The Impact of Open Admissions in the City University of New York on Community College Faculty
James D. Ryan
Culture as Content: An Integrated Approach to Second Language Learning
Judith Barbanel

Regular features include:

Roundtable, Book Reviews, Media, and Poetry.

Published Semiannually.

Subscription rates:

Individuals: \$7.50/yr; \$15/2yrs.

Institutions: \$15/yr; \$30/2yrs.

Domestic first-class mail add \$8/yr.

Foreign surface mail add \$8/yr.

Foreign airmail add \$16/yr.



TRANSACTION PERIODICALS CONSORTIUM

Dept. 2000 Rutgers-The State University New Brunswick, NJ 08903

Revue française de sociologie

이 논문은 2004년 12월 15일 제 10회 제 1차 정기학술대회에서 발표된 논문이다.

© 2002 Blackwell Science Ltd *Journal of Internal Medicine* 252: 105–112

100% 100% 100% 100% 100% 100% 100% 100% 100% 100%

1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 26

DEVENIR ADULTE

Un nouvel âge de la vie	1967-1968
Quitter ses parents	1968-1970 / 1970-1971 1971-1972
Journer en chômage	1970-1971 1971-1972 / 1972-1973 / 1973-1974 1974-1975
Succès dans mes études	1974-1975
L'identité catholique des Français II. Appartenance et socialisation	1975-1976

[illegible]

Keywords: child abuse; child sexual abuse; child sexual exploitation

Public Opinion Quarterly

**For half a century,
the source for the
latest methods,
theories and issues in
opinion research**



Political scientists, psychologists, sociologists, journalists, polling directors, statisticians—practitioners and academicians—depend on this proven source of interdisciplinary research.

Articles incorporate **POQ's** unique concentration on methods and theories, with tested applications throughout the social and behavioral sciences.

And no other journal covers trends in current opinion as **POQ** does. In each issue, "The Polls: Reviews and Reports" brings you both summaries of opinion trends and critical assessments of major polls. Here, data collection often spans years and a variety of sources, saving **POQ** readers substantial research time.

To keep pace with the latest research—and to enhance your own research—subscribe to **Public Opinion Quarterly**.

Editor: Howard Schuman,

University of Michigan Survey Research Center

Published for the American Association for Public Opinion Research
by The University of Chicago Press

Regular one-year subscription rates: \$20.00 Individuals; \$40.00 Institutions; \$18.00 Students (with copy of valid ID). Outside USA add \$3.00 for postage. Visa and MasterCard payments accepted. To order send check, purchase order, or complete charge card information to The University of Chicago Press, Journals Division, Dept. SP05A, P.O. Box 37005, Chicago, IL 60637.

Footnotes sending you on a foot race?
Trying to build a better bibliography?
Sticky fingers snatching selections from your shelves?
Complete your collection with back issues of

American Journal of Sociology

While supplies last, you can order back issues of the journal and build a functional collection that will serve you year after year. Choose single copies, volumes, or a set of all remaining issues at discounted prices. Available are issues covering a range of topics, including

John Hagan, John Simpson, and A.R. Gillis, A Power-Control Theory of Gender and Delinquency 92:4

Denise Bielby and William T. Bielby, Household Responsibilities and the Allocation of the Work Effort 93:5

Otis Dudley Duncan, Magnus Stenbeck, and Charles Brody, Discovering Heterogeneity: Continuous versus Discrete Variables 93:6

Mark Granovetter, Economic Action and Social Structure: The Problem of Embeddedness 91:3

Glenn Firebaugh and Kenneth E. Davis, Trends in Antiblack Prejudice, 1972-1984: Region and Cohort Effects 94:2

Theodore D. Kemper, How Many Emotions Are There? Wedding the Social and Autonomic Components 93:2

Michèle Lamont, How to Become a Dominant French Philosopher: The Case of Jacques Derrida 93:3

Michael Hout, More Universalism, Less Structural Mobility: The American Occupational Structure in the 1980s 93:6

Back issue order form

American Journal of Sociology

☐ Yes! Please send me the following back issues of *AJS*:

☐ Set of 25 remaining issues (Vols. 91-94, 1985-1989)

☐ \$87.50 Individuals ☐ \$159.40 Institutions

☐ Individual volumes 91-95 (6 issues per volume)

☐ \$26.40 Individuals ☐ \$48.85 Institutions

Specify volume: ☐ 91 ☐ 92 ☐ 93 ☐ 94 ☐ 95

☐ Single copies ☐ \$5.00 Individuals ☐ \$9.30 Institutions

Indicate volume/number: _____

All journal rates include domestic postage; outside USA, please add 75¢ per issue additional postage.

Availability of back issues is subject to current inventory at the time your order is processed

Name _____

Address _____

City _____

State/Zip _____

Payment Options

☐ Charge my ☐ MasterCard ☐ Visa Exp. date _____

Acct. No. _____

Signature _____

☐ Check enclosed (payable to *AJS*) ☐ Purchase order enclosed ~

Mail to The University of Chicago Press, Journals Division, P.O. Box 37005, Chicago, IL 60637.

SAIBI 7/90

The Nature of Work

Sociological Perspectives

edited by Kai Erikson and Steven Peter Vallas

In this book, such leading authorities as Arthur Stinchcombe, Eliot Freidson, S.M. Miller, Theda Skocpol, Herbert Gans, and Rosabeth Moss Kanter discuss the changing nature of work in America. Among the provocative issues they raise are: what alienation from work means; what happens within the family when both husband and wife work; how work values are changing; whether work sharing is feasible in America; and what the future will be like for workers in advanced industrial countries. \$35.00

American Sociological Association Presidential Series



"No, keep the line. But brother, could you spare a job?"

Cartoon by Kevin Weeks



Yale University Press

Dept. 493, 92A Yale Station, New Haven, CT 06520

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Required by 39 U.S.C. 3685)

1. Title of publication: *American Journal of Sociology*
 - a. Publication number: 00029602
2. Date of filing: October 24, 1990
3. Frequency of issue: Bi-monthly
 - a. No. of issues published annually: 6
 - b. Annual subscription price: \$70.00
4. Location of known office of publication: 5720 S. Woodlawn Avenue, Chicago, Cook, Illinois 60637
5. Location of the headquarters or general business offices of the publishers: 5720 S. Woodlawn Avenue, Chicago, Illinois 60637.
6. Names and addresses of publisher, editor, and managing editor:

Publisher: The University of Chicago Press, 5720 S. Woodlawn Avenue, Chicago, Illinois 60637
 Editor: William L. Parish, 5720 S. Woodlawn Ave., Chicago, Illinois 60637
 Managing Editor: Susan Allen, 5720 S. Woodlawn Ave., Chicago, Illinois 60637
7. Owner: The University of Chicago Press, 5720 S. Woodlawn Ave., Chicago, Illinois 60637
8. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None
9. The purposes, functions, and nonprofit status of this organization and the exempt status for Federal income tax purposes have not changed during preceding 12 months.

10. Extent and nature of circulation

	Average Number Copies Each Issue During Preceding 12 Months	Single Issue Nearest To Filing Date
A. Total number copies printed	7,850	7,700
B. Paid circulation		
1. Sales through dealers and carriers, street vendors and counter sales		
2. Mail subscriptions	6,432	6,530
C. Total paid circulation	6,432	6,530
D. Free distribution samples, complimentary, and other free copies	215	217
E. Total distribution (sum of C & D)	6,647	6,747
F. Copies not distributed:		
1. Office use, leftover, unaccounted, spoiled after printing	1,203	953
2. Returns from news agents		
G. Total (sum of E and F)	7,850	7,700
11. I certify that the statements made by me above are correct and complete		

ROBERT SHIRRELL, Journals Manager

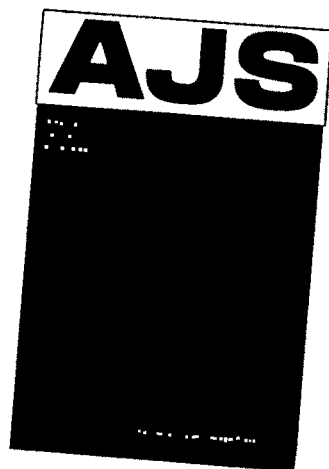
If you're the sort of reader who needs

American Journal of Sociology

ask yourself these questions . . .

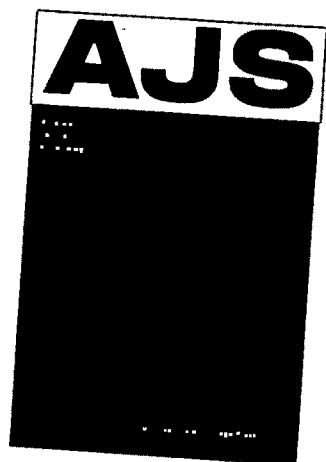
Q ■ How can you keep track of important research, yet make more efficient use of your time in the library?

A ■ By entering your personal subscription now, using the order form on reverse.



Q ■ How can you keep your collection of journals complete and avoid missing a single issue?

A ■ By renewing your subscription now, using the order form on reverse.



No other journal covers the field like

American Journal of Sociology

American Journal of Sociology

ENTER A NEW SUBSCRIPTION AND SAVE 15%!

	New	Renewal
<input type="checkbox"/> Individuals	<input type="checkbox"/> \$29.00 (J)	<input type="checkbox"/> \$35.00
<input type="checkbox"/> Institutions	<input type="checkbox"/> 59.00 (J)	<input type="checkbox"/> 70.00
<input type="checkbox"/> Students	<input type="checkbox"/> 21.00 (J)	<input type="checkbox"/> 25.00
<input type="checkbox"/> ASA and BSA Members	<input type="checkbox"/> 30.00	<input type="checkbox"/> 30.00

OUTSIDE USA? Please add \$9.00 for postage.

BACK ISSUES AT 50% OFF:

☐ Set of 25 available issues: ☐ Individuals \$87.50 ☐ Institutions \$159.40

OUTSIDE USA? Please add 75¢ per copy for postage.

- ☐ **Charge** my ☐ **Visa** ☐ **MasterCard** Exp. date _____
Acct. # _____
Signature _____
☐ **Check** enclosed (payable to journal)

Name _____
Address _____
City _____
State/Country _____ ZIP _____

Please mail to **The University of Chicago Press, Journals Division,**
P.O. Box 37005, Chicago, IL 60637.

IXIXX

American Journal of Sociology

ENTER A NEW SUBSCRIPTION AND SAVE 15%!

	New	Renewal
<input type="checkbox"/> Individuals	<input type="checkbox"/> \$29.00 (J)	<input type="checkbox"/> \$35.00
<input type="checkbox"/> Institutions	<input type="checkbox"/> 59.00 (J)	<input type="checkbox"/> 70.00
<input type="checkbox"/> Students	<input type="checkbox"/> 21.00 (J)	<input type="checkbox"/> 25.00
<input type="checkbox"/> ASA and BSA Members	<input type="checkbox"/> 30.00	<input type="checkbox"/> 30.00

OUTSIDE USA? Please add \$9.00 for postage.

BACK ISSUES AT 50% OFF:

☐ Set of 25 available issues: ☐ Individuals \$87.50 ☐ Institutions \$159.40

OUTSIDE USA? Please add 75¢ per copy for postage.

- ☐ **Charge** my ☐ **Visa** ☐ **MasterCard** Exp. date _____
Acct. # _____
Signature _____
☐ **Check** enclosed (payable to journal)

Name _____
Address _____
City _____
State/Country _____ ZIP _____

Please mail to **The University of Chicago Press, Journals Division,**
P.O. Box 37005, Chicago, IL 60637.

IXIXX

Joseph A. Schumpeter

The Economics and Sociology of Capitalism

Edited by Richard Swedberg

The renowned economist Joseph A. Schumpeter made seminal contributions not only to economic theory but also to sociology. His work is now attracting wide attention among sociologists, as well as experiencing a remarkable revival among economists. This anthology, which serves as an excellent introduction to Schumpeter, emphasizes his broad socio-economic vision and his attempt to analyze economic reality from several different perspectives. An introductory essay by Richard Swedberg enhances our understanding of Schumpeter's life, work and character. Swedberg's essay stresses Schumpeter's ability to draw on several social sciences in his study of capitalism.

Paper: \$19.50 ISBN 0-691-00383-1 Cloth: \$55.00 ISBN 0-691-04253-5

FROM PROVINCES INTO NATIONS

Demographic Integration
in Western Europe
1870-1960

SUSAN COLLIS WATKINS

Between 1870 and 1960, national boundaries became more evident on the demographic map of Western Europe. In most of the fifteen countries examined here, differences in marital fertility, illegitimacy, and marriage from one province to another diminished considerably. The book interprets the shift as evidence of the influence of communities on demographic behavior, and as an indication of the growing predominance of national over local communities. The author uses demographic data to examine themes of interest to anyone examining the "integration" of modern societies.

Cloth: \$42.50 ISBN 0-691-09451-9



AT YOUR BOOKSTORE OR

Princeton University Press

41 WILLIAM ST. • PRINCETON, NJ 08540 • (609) 258-4800
ORDERS: 800-PRS-ISBN (777-4728)

The Culture We Deserve
JACQUES BARZEN

Barzen's book is a collection of essays that deal with the cultural and political life of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States. The book is a must-read for anyone interested in the culture of the United States.

Peace Games
THEODORE CAPLOW

Caplow's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

A Lasting Relationship

*Parent and Child in
Our Three Cultures*

LINDA POLLOCK

Pollock's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

Femmes d'Esprit

Women's Portraits of America
KIRSTEN POWELL

and **ELIZABETH CHILDS**

Childs's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

Sex and Power

*The Power of Women in America:
Political, Social, and Racial*

History
JOHN H. HUGHES

DONALD MEYER

Meyer's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

Sex and Morality in the U.S.

*A Long and Unpopular History
of American Prostitution*

ALBERT D. KASSIN, COLIN J.

WILLIAMS, EUGENE L. EVITT

Evitt's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

The American Kaleidoscope

*Race, Ethnicity,
and the Urban Culture*

LAWRENCE H. FUCHS

Fuchs's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

**Society and the Adolescent
Self-Image**

1960-1970

MORRIS ROSENBERG

Rosenberg's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

The Arrogance of Race

*Historical Perspectives on Slavery,
Race, and Social Inequality*

GEORGE MEREDITH RUSSELL

Russell's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

**The Political Economy
of Slavery**

*Studies in the Economic and Society
of the Slave South*

EUGENE D. GONOVSKI

Gonovski's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

The Question of Discrimination
Racial Inequality

in the U.S. Labor Market

Edited by **STEVEN SHULMAN**

and **WILLIAM DARTY, JR.**

Darty's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

The Politics of Knowledge

The Carnegie Corporation

Philanthropy and Public Policy

HELEN CONSTANCE FAGEMANN

Fagemann's book is a collection of essays that deal with the culture of the United States. The essays are written in a clear, concise, and accessible style, and they provide a valuable insight into the author's views on the culture of the United States.

New England

Including Wesleyan University Press

University Press of New England • Hanover, NH 03757 • 603/271-1761

AJS

American
Journal
of Sociology
Volume 96 Number 5
March 1991

Mind, Self, Society, and Computer — *Wolfe*
Simmel and Parsons Reconsidered — *Levin*

POLITICS AND SOCIETY

Why Do Strikes Turn Violent? — *Grant and Wallace*

"Red" Unions and "Bourgeois" Contracts? —
Sagean, Norris, and Zolotor

Local Mobilization and Social Movement Tactics — *Bernstein*

The Economic Theory of Migration — *Chapman*

The University of Chicago Press

WILLIAM L. PARISH, Editor

WAYNE BAKER, JULIE E. BRINES, and NADER SOHRABI, Associate Editors
WENDY GRISWOLD, DANIEL BRESLAU, and JOLEEN KIRSCHENMAN,
Book Review Editors

**STEPHEN J. ELLINGSON, JASON B. JIMERSON, SUNHWA LEE, ZAI
LIANG, and MICHAEL J. REYNOLDS**, Associate Book Review Editors

SUSAN ALLAN, Editorial Manager

JANE MATHER, Editorial Assistant

Consulting Editors ELIJAH ANDERSON • RONALD AMINZADE • RICHARD T. CAMPBELL • DANIEL B. CORNFIELD • PAUL DIMAGGIO • MARY L. FENNELL • GARY GEREFFI • DAVID F. GREENBERG • ROBERT ALUN JONES • BARRY MARKOVSKY • ROSS L. MATSUEDA • RUTH MILKMAN • S. PHILIP MORGAN • TROND PETERSEN • JONATHAN RIEDER • ROBERT J. SAMPSON • AAGE B. SØRENSEN • JOHN D. STEPHENS • ANDREW G. WALDER • PAMELA BARNHOUSE WALTERS • LAWRENCE L. WU • DAVID ZARET

International Consulting Editors RAYMOND BOUDON (France) • PIERRE BOURDIEU (France) • TOM COLBJØRNSEN (Norway) • GUDMUND HERNES (Norway) • YONG-HAK KIM (Korea) • JOHN MYLES (Canada) • NORIKO O. TSUYA (Japan) • BRYAN S. TURNER (England)

Editorial Board C. ARNOLD ANDERSON • GARY S. BECKER • CHARLES E. BIDWELL • DONALD J. BOGUE • MARY C. BRINTON • TERRY NICHOLS CLARK • JAMES S. COLEMAN • JOHN L. COMAROFF • GEORGE STEINMETZ • PHILIP M. HAUSER • EVELYN KITAGAWA • NANCY LANDALE • EDWARD O. LAUMANN • DONALD N. LEVINE • DOUGLAS S. MASSEY • JOHN F. PADGETT • EDWARD SHILS • FRED L. STRODTBECK • GERALD D. SUTTLES • MARTA TIENDA • WILLIAM J. WILSON

THE AMERICAN JOURNAL OF SOCIOLOGY (ISSN 0002-9602) is published bimonthly in July, September, November, January, March, and May by The University of Chicago at The University of Chicago Press, Journals Division, P. O. Box 37005, Chicago, Illinois 60637. Subscription rates, U.S.A.: institutions, 1 year \$70.00, individuals, 1 year \$35.00. Student subscription rate, U.S.A.: 1 year \$25.00 (photocopy of valid student ID must accompany subscription). ASA and BSA members, 1 year \$30.00. All other countries add \$9.00 for each year's subscription to cover postage. Subscription agent for Japan: Kinokuniya Company, Ltd. Single copy rates: institutions \$11.75, individuals \$6.00. Back issues available from 1982 (vol. 88). Volumes in microfilm available from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106, and Kraus Reprint and Periodicals, Route 100, Millwood, New York 10546. Subscriptions are payable in advance. Subscriptions will be entered to start with the first issue to be published after receipt of order. *Claims for missing numbers* should be made within the month following the regular month of publication. The publisher expects to supply missing numbers free only when losses have been sustained in transit and when the reserve stock will permit. *Postmaster*: Send address changes to The University of Chicago Press, Journals Division, P. O. Box 37005, Chicago, Illinois 60637.

ADVERTISING space in THE AMERICAN JOURNAL OF SOCIOLOGY is available, as is rental of its subscriber list. For information and rates, please contact the advertising sales staff, The University of Chicago Press, Journals Division, 5720 South Woodlawn Avenue, Chicago, Illinois 60637, phone (312) 702-8187 or 702-7361. Advertising and list rental is limited to material of scholarly interest to our subscribers.

Copying beyond Fair Use. The code on the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made beyond those permitted by Section 107 or 108 of the U.S. Copyright Law provided that copies are made only for personal or internal use or for the personal or internal use of specific clients and provided that the copier pay the stated per-copy fee through the Copyright Clearance Center, Inc., Operations Center, 27 Congress St., Salem, Massachusetts 01970. To request permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale, kindly write to Permissions Department, The University of Chicago Press, 5801 S. Ellis Ave., Chicago, Illinois 60637. If no code appears on the first page of an article, permission to reprint may be obtained only from the author. Second-class postage paid at Chicago, Illinois, and at additional mailing offices.

© 1991 by The University of Chicago. All rights reserved.

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984. ☐

AJS

American Journal of Sociology

Volume 96 No. 5 March 1991

CONTENTS

- 1073 Mind, Self, Society, and Computer: Artificial Intelligence and the Sociology of Mind
ALAN WOLFE

- 1097 Simmel and Parsons Reconsidered
DONALD N. LEVINE

Politics and Society

- 1117 Why Do Strikes Turn Violent?
DON SHERMAN GRANT II AND MICHAEL WALLACE
- 1151 "Red" Unions and "Bourgeois" Contracts?
JUDITH STEPAN-NORRIS AND MAURICE ZEITLIN
- 1201 Legal Mobilization as a Social Movement Tactic: The Struggle for Equal Employment Opportunity
PAUL BURSTEIN
- 1226 The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing
JONATHAN CRANE

Book Reviews

- 1260 *Coercion, Capital and European States, A.D. 990-1990* by Charles Tilly
MICHAEL MANN
- 1262 *Surveillance, Power and Modernity: Bureaucracy and Discipline from 1700 to the Present Day* by Christopher Dandeker
RICHARD V. ERICSON

- 1264 *Global Formation: Structures of the World-Economy* by Christopher Chase-Dunn
GEORGE M. THOMAS
- 1267 *The Globalisation of High Technology Production: Society, Space and Semiconductors in the Restructuring of the Modern World* by Jeffrey Henderson
GARY GEREFFI
- 1269 *Working-Class Organization and the Return to Democracy in Spain* by Robert M. Fishman
ROBERTO P. KORZENIEWICZ
- 1271 *Local Politics and Participation in Britain and France* by Albert Mabileau, George Moyser, Geraint Parry, and Patrick Quantin
ROGER V. GOULD
- 1272 *Small Property versus Big Government: Social Origins of the Property Tax Revolt* by Clarence Lo
ROBERTA GARNER
- 1274 *Culture Shift in Advanced Industrial Society* by Ronald Inglehart
JAMES J. DOWD
- 1276 *Universities and the Capitalist State: Corporate Liberalism and the Reconstruction of American Higher Education, 1894-1928* by Clyde W. Barrow
BARBARA ANN SCOTT
- 1278 *Agrarian Capitalism in Theory and Practice* by Susan Archer Mann
JESS GILBERT
- 1280 *Women and Social Welfare: A Feminist Analysis* by Dorothy C. Miller
LISA D. BRUSH AND KRISTIN K. BARKER
- 1282 *When Ladies Go A-Thieving: Middle-Class Shoplifters in the Victorian Department Store* by Elaine S. Abelson
Offending Women: Female Lawbreakers and the Criminal Justice System by Anne Worrall
SALLY S. SIMPSON
- 1285 *Women at the Wall: A Study of Prisoners' Wives Doing Time on the Outside* by Laura T. Fishman
NANCY A. NAPLES

- 1287 *The Politics and Morality of Deviance: Moral Panics, Drug Abuse, Deviant Science and Reversed Stigmatization* by Nachman Ben-Yehuda
WILLIAM GRONFEIN
- 1289 *Getting Paid: Youth Crime and Work in the Inner City* by Mercer L. Sullivan
DONALD CUNNIGEN
- 1290 *Working Class without Work: High School Students in a Deindustrializing Economy* by Lois Weis
HENRY M. LEVIN
- 1292 *Girls and Boys in School: Together or Separate?* by Cornelius Riordan
ALAN C. KERCKHOFF
- 1294 *Constructing a Sociology of the Arts* by Vera L. Zolberg
JUDITH ADLER
- 1296 *The Laugh-Makers: Stand-up Comedy as Art, Business, and Life-Style* by Robert A. Stebbins
LORI V. MORRIS
- 1297 *The Written Suburb: An American Site, an Ethnographic Dilemma* by John D. Dorst
BONNIE LINDSTROM
- 1299 *Jookin': The Rise of Social Dance Formulations in African-American Culture* by Katrina Hazard-Gordon
CHARLES STEVENS
- 1300 *Lives in Between: Assimilation and Marginality in Austria, Brazil, and West Africa, 1780-1945* by Leo Spitzer
ZAI LIANG
- 1302 *Immigrant America: A Portrait* by Alejandro Portes and Rubén G. Rumbaut
THOMAS J. ESPENSHADE
- 1304 *The Economic Consequences of Migration* by Julian L. Simon
Friends or Strangers: The Impact of Immigrants on the U.S. Economy by George J. Borjas
YINON COHEN
- 1307 *Organizing for Collective Action: The Political Economies of Associations* by David Knoke
ARTHUR L. STINCHCOMBE

- 1309 *The Appeal of Civil Law: A Political-Economic Analysis of Litigation* by Wayne V. McIntosh
NEAL SHOVER
- 1310 *Power in the Highest Degree: Professionals and the Rise of a New Mandarin Order* by Charles Derber, William A. Schwartz, and Yale Magrass
MAGALI SARFATTI LARSON
- 1312 *Marginalism and Discontinuity: Tools for the Craft of Knowledge and Decision* by Martin H. Krieger
ELLSWORTH R. FUHRMAN
- 1314 *A Measure for Measures: A Manifesto for Empirical Sociology* by Ray Pawson
DAVID G. WAGNER
- 1316 *The Freudians: A Comparative Perspective* by Edith Kurzweil
PETER HOMANS
- 1318 *Demography and Degeneration: Eugenics and the Declining Birthrate in Twentieth-Century Britain* by Richard A. Soloway
DOUGLAS L. ANDERTON
- 1320 *Rural and Small Town America* by Glenn V. Fuguitt, David L. Brown, and Calvin L. Beale
LEIF JENSEN
- 1322 *Agents and Victims in South China: Accomplices in Rural Revolution* by Helen F. Siu
DAVID ZWEIG
- 1323 *Land, Labor and the Origins of the Israeli-Palestinian Conflict, 1882-1914* by Gershon Shafir
JOHN FORAN

Erratum

The January issue of this journal (vol. 96, no. 4) contains "Adolescent Competence and the Shaping of the Life Course" by John A. Clausen, professor of sociology, emeritus, at the University of California, Berkeley, and research sociologist at Berkeley's Institute of Human Development. In our listings, however, Professor Clausen's middle initial is given as "S.," not "A." We deeply regret this error.

IN THIS ISSUE

ALAN WOLFE is the Michael E. Gellert Professor of Sociology and Political Science and dean of the Graduate Faculty at the New School for Social Research. His most recent book is *Whose Keeper? Social Science and Moral Obligation* (University of California Press, 1989). He has edited a collection of essays by sociologists on recent transformations in American society that will be published in 1991; he is also writing a book on the interpretive self and the meaningful society.

DONALD N. LEVINE is the Peter B. Ritzma Professor of Sociology at the University of Chicago. He is currently editor of the *Heritage of Sociology* series published by the University of Chicago Press, and he serves on the international team of scholars who are publishing a critical edition of the collected works of Georg Simmel. His recent publications include *The Flight from Ambiguity: Essays in Social and Cultural Theory* (University of Chicago Press, 1985).

DON SHERMAN GRANT II is a doctoral candidate in sociology at the Ohio State University. His research interests include the political economy of the American labor movement, metropolitan racial inequality, deindustrialization, and state economic development policies. He is currently completing his dissertation on capital mobility and employment across the American states.

MICHAEL WALLACE is associate professor of sociology at Indiana University. His current research includes the study of changing technology in the workplace, the causes and consequences of industrial restructuring, and the political economy of labor conflict in the United States and other countries.

JUDITH STEPAN-NORRIS is assistant professor of sociology at the University of California, Irvine. She is currently working on a case study of union democracy, which is a part of a larger project on the role of Left leadership in the organized American labor movement.

MAURICE ZEITLIN is professor of sociology at the University of California, Los Angeles. His most recent works are *Landlords and Capitalists: The Dominant Class of Chile* with R. E. Ratcliff (Princeton University Press, 1988) and *The Large Corporation and Contemporary Classes* (Rutgers University Press, 1989). His current research is on "class, state, and the CIA."

PAUL BURSTEIN is associate professor of sociology and adjunct associate professor of political science at the University of Washington. His major fields of interest are political sociology, social movements, social stratification, and the sociology of law. He brings these fields together in his work on equal employment opportunity, investigating how politics and law may be used to affect economic and social outcomes for minorities and women. He has just begun a new project on the development of work-and-family policy in the United States.

JONATHAN CRANE is assistant professor of the Department of Sociology and the Institute for Government and Public Affairs at the University of Illinois at Chicago.

Information for Contributors

Editorial Procedures: All papers deemed appropriate for the *AJS* are sent out anonymously to readers. The editors rely heavily on the judgments of those readers, although they are not bound by them. To protect anonymity, only the title should appear on the manuscript. Attach a cover page with the title of the manuscript, your name, and your affiliation. All identifying references and footnotes should appear on a separate page. A legible, carefully prepared manuscript will facilitate the work of readers. Manuscripts are accepted for publication subject to nonsubstantive editing with the understanding that the *AJS* has the right of first publication. Submission of a manuscript to the *AJS* is taken to indicate the author's commitment to publish in this *Journal*. No paper known to be under consideration by any other journal will be reviewed by the *AJS*. Upon publication, all rights, including subsidiary rights, are owned by the University of Chicago Press. The author retains the right to use his article without charge in any book of which he is the author or editor after it has appeared in the *Journal*.

Manuscript Acceptance Policy: While it is our policy to require the assignment of copyright on most journal articles and review essays, we do not usually request assignment of copyright for other contributions. Although the copyright to such a contribution may remain with the author, it is understood that, in return for publication, the journal has the nonexclusive right to publish the contribution and the continuing right, without limit, to include the contribution as part of any reprinting of the issue and/or volume of the journal in which the contribution first appeared by any means and in any format, including computer-assisted storage and readout, in which the issue and/or volume may be reproduced by the publisher or by its licensed agencies.

Preparation of Copy

1. Type *all* copy—including indented matter, footnotes, tables, and references—*double-spaced*, allowing generous margins at top, bottom, and sides of page. Please do not break words at ends of lines or justify right-hand margins. Indicate italics by underlining only. Number all footnotes, including acknowledgement footnote (which should be "1").

2. Type each table on a separate page. Refer to each table in numerical order in the text. Prepare tables without vertical lines. Tables should not contain more than 20 two-digit columns or the equivalent.

3. Clarify all mathematical symbols (e.g., Greek letters) with words in the margins of the manuscript.

4. Draw figures on white paper with india ink. Original or glossy print of professionally drawn figure will be required if manuscript is accepted.

5. Include a brief abstract (not more than 100 words) summarizing the findings.

6. *Four copies* of the manuscript and abstract, on white paper, must be submitted. Manuscripts should be addressed to the Editor of the *AMERICAN JOURNAL OF SOCIOLOGY*, 1130 East 59th Street, The University of Chicago, Chicago, Illinois 60637. *Manuscripts are not returned to authors.* Enclose a self-addressed stamped postcard, containing the manuscript title, to obtain acknowledgment of manuscript receipt. No other acknowledgment will be sent.

7. Each article submitted to the *AJS* must be accompanied by a check or

money order for \$15.00, payable to The University of Chicago Press in U.S. currency or its equivalent by money order or bank draft. Papers will not be reviewed until this fee has been paid. The submission fee will be waived for papers solely by student authors. Submissions from students must be accompanied by a faculty member's certification of their student status. Citizens of countries with restrictions on the export of U.S. dollars may request waiver of the submission fee

Format of References in Text: All references to monographs, articles, and statistical sources are to be identified at the appropriate point in the text by last name of author, year of publication, and pagination where appropriate, all within parentheses. Footnotes are to be used only for substantive observations. Specify subsequent citations of the same source in the same way as the first one; do not use "ibid.," "op. cit.," or "loc. cit."

1 When author's name is in the text: Duncan (1959). When author's name is not in text: (Gouldner 1963).

2. Pagination follows year of publication: (Lipset 1964, pp. 61-65).

3. For more than three authors, use "et al." For institutional authorship, supply minimum identification from the beginning of the complete citation (U.S. Bureau of Census 1963, p. 117).

4 With more than one reference to an author in the same year, distinguish them by use of letters (a, b) attached to the year of publication: (1965a).

5. Enclose a series of references with a single pair of parentheses, separated by semicolons.

Format of References: List all items, including machine-readable data files (MRDF), alphabetically by author (providing the full list of multiple authors) and, within author(s), by year of publication, in an appendix titled "References." Examples follow:

Davis, James Allan. 1978. *General Social Survey, 1972-1978: Cumulative Data* (MRDF). NORC ed. Chicago: NORC. Distributed by Roper Public Opinion Research Center, New Haven, Conn.

Davis, K. 1963a. "Social Demography." Pp. 124-37 in *The Behavioral Sciences Today*, edited by Bernard Berelson. New York: Basic.

——— 1963b. "The Theory of Change and Response in Modern Demographic History." *Population Index* 29:345-66.

Goode, W. J. 1967. "The Protection of the Inept." *American Sociological Review* 32:5-19.

Moore, Wilbert E., and Arnold S. Feldman. 1960. *Labor Commitment and Social Change in Developing Areas*. New York: Social Science Research Council.

Sanford, Nevitt, ed. 1962. *The American College*. New York: Wiley.

U S. Bureau of the Census. 1970. *Census of Population and Housing 1970, Summary Statistic File 4H: U.S.* (MRDF). DUALabs ed. Washington, D.C.: Bureau of the Census. Distributed by DUALabs, Rosslyn, Va.

Weber, Max. (1921) 1968. "Society's Problems." Pp. 12-16 in *Economy and Society*, edited by Guenther Roth and Claus Wittich. New York: Bedminster.

(Rev. 7/87)

Mind, Self, Society, and Computer: Artificial Intelligence and the Sociology of Mind¹

Alan Wolfe

New School for Social Research

Recent developments in artificial intelligence (AI) raise the possibility that humans may not, as classical sociological theory held, be unique among species. A Meadian distinction between brain as a neurological phenomenon and mind as a sociological one is introduced to examine such a claim. Software approaches to AI avoid the problem of modeling the human brain, but, because they require thorough and unambiguous instructions, they cannot model how human brains understand external reality. Hardware approaches to AI, such as parallel data-processing models, do attempt to model the brain but only in an engineering sense: in substituting procedures for meaning, they again fail to account for how human brains, let alone human minds, work. The hypothesis of human distinctiveness, consequently, is not rejected, but expanded and elaborated. The actual results of work in AI support interpretative trends in sociological theorizing rather than system-oriented ones.

I. NATURE AND ARTIFICE

Sociology developed toward the end of the 19th century in a specific intellectual milieu dominated by Darwinian evolutionary biology. While this impetus sometimes had the effect of modeling society on the homeostatic functioning of the human organism, especially in Durkheim, it also gave rise to a dualistic view of nature and society. Most thinkers in the sociological tradition shared a philosophical anthropology that understood the special character of being human as the ability to transform and control nature (Honneth and Joas 1988). Weber, for example, viewed culture as "man's emancipation from the organically prescribed cycle of natural life" (Gerth and Mills 1958, p. 356), while, for Durkheim, "it is civilization that has made man what he is: it is what distinguishes him from the animal: man is man only because he is civilized" (1973, p. 149).

¹ I wish to thank Charles W. Smith, Dean Savage, Melvin Reichler, Eugene Rothenberg-Halton, and Jeff Coulter for criticism, as well as anonymous reviewers for *AJS*. Requests for reprints should be directed to Alan Wolfe, New School for Social Research, 65 Fifth Avenue, New York, New York 10003.

Civilization was generally viewed as artificial, a development sometimes lamented but more often than not appreciated as a precondition for the development of more purposive forms of action. (For a quintessential statement, see Elias [1978].) In contemporary sociology as well, an emphasis on the importance of the artificial—or, in the discipline's current parlance, the socially constructed—aspects of reality over the biological has been applied to such once-allegedly “natural” phenomena as sex roles (Epstein 1988), homosexuality (Greenberg 1988), and, most relevant for this article, mind (Coulter 1979).

Just as Darwinian theory stimulated sociology by posing the question of whether there were capacities that—in contrast to animal behavior—were uniquely and specifically human, recent research in artificial intelligence (AI), cognitive science, and neurobiology raises exactly the same question—only this time in contrast to machine behavior. Artificial intelligence can be viewed as a *Gedankenexperiment*, an effort to pose a series of interrelated “what if” questions. The fascination with AI is surely due to the philosophical issues raised by the possibility that machines can carry out activities once thought to be exclusively human. While many of those issues—such as how minds represent reality, how language works, whether a little person sits in the brain giving it instructions, and whether we can gain access to the thoughts of others—have been addressed in great detail in the literature spawned by AI, one important thought experiment has received little attention, especially from sociologists. What if the duality between the natural and the artificial that has shaped sociological thought is wrong?

That possibility has been raised in AI work on two fronts. On the one hand, Simon (1969) calls efforts to understand language, problem solving, rule following, and cognition based on an analogy with machines the “sciences of the artificial.” From such a perspective, human activities such as producing language are viewed as “natural,” thereby *reversing* the dualism at the heart of sociological theory, a contrast captured well in Boden's (1981) title, *Artificial Intelligence and Natural Man*. On the other hand, more recent work in AI posits *eliminating* that duality. This is the implication of the notion of a unified theory of cognition, that there may be similar ways of processing information that link DNA reproductive codes to animal cognition to human decision making and finally to machine calculation (Waldrop 1988a, 1988b; Churchland and Sejnowski 1988; however, see Edelman [1988]). If such is the case, then at some point sociology would disappear, its laws reduced to biochemistry. In either case, the proper study of man, as Simon puts it, would no longer be man but “the science of decision” (1969, p. 83).

Turkle (1984, p. 13) describes the computer as an “evocative . . . object that fascinates, disturbs equanimity, and precipitates thought.”

Carried away by the extraordinary ability of machines to process information—especially in contrast to the sloppy, irrational, and trial-and-error methods used by humans—some adherents to what Searle (1981) has called “the strong case for AP” envision the possibility of a “postbiological” world in which robots, because their purely cognitive powers have, in some areas, already surpassed ours, will carry out most of the work that exists in society (Moravec 1988, p. 5). If indeed “these artificial intelligences will help run society and relieve mankind of the burden of being the leading species” (McCorduck 1981, p. 210), then human society can be viewed as a passing phase in the evolutionary cycle. “And in all humility, we really must ask: How smart are the humans who’ve taught these machines? On the evolutionary time scale, thinking animals are relatively recent arrivals. Evolution hasn’t had a great deal of time to work on the perfection of human cognition” (Feigenbaum and McCorduck 1983, p. 41). With the development of AI, we are back to where sociology began, reflecting on the implications of Darwin.

This article reflects an effort to participate in the thought experiment, stimulated by work in AI, concerning the duality between nature and artifice. In the spirit of such experiments, the following “what if” questions can be asked: What would AI have to demonstrate to confirm the hypothesis that machines can be a substitute for human forms of intelligence? How far has actual work in, as opposed to euphoric claims about, AI come to meeting that goal?

These questions are of great importance for sociological theory. One of the reasons sociological theorists such as Weber (Gerth and Mills 1958) and Mead (1934) compared the human species to other forms of biological life was to argue the importance of the meaning-producing capacities of the human species. To possess the ability to attribute meaning is not simply to follow precoded rules but to bring to situations an awareness of context that allows flexibility in the application of rules. The same ground exists for comparing human intelligence with AI. If it can be shown that humans possess meaning-generating capabilities that machines do not, it follows that efforts to theorize about human behavior based on essentially algorithmic, automatically functioning, rule-following models—which have become increasingly popular in sociology (see, e.g., the work of Niklas Luhmann [1982, 1989])—are not as appropriate to the study of human endeavors as those emphasizing ambiguity, multiple realities, and the social construction of meaning.

II. MIND AND BRAIN

Researchers in AI have a test of machine intelligence called the Turing test—not, it ought to be added, in the original form in which Turing

(1950) proposed it but in the form in which most contemporary work in AI uses it (see Karelis [1986] and Shannon [1989] on this point). To determine whether a machine is intelligent, the Turing test suggests that we imagine a person being given instructions on what to do by both a machine and another person. When the person can no longer tell which of them is giving the instructions, intelligence has been modeled by the machine. How, in the same spirit, do we know we are in the presence of human, rather than machine, intelligence? To answer that question, we can turn to the one sociological theorist who most addressed questions of mind: George Herbert Mead.

Mead's (1934) argument is that the difference between human and nonhuman species involves two further distinctions: all animal species have brains, but only the human has a mind; all other species have bodies, whereas only the human has a self. In the first distinction, brains are physiological entities, organs composed of material properties and represented by what in Mead's day was called the central nervous system. (More recent biological insights into the brain utilize a different terminology; for important work in the area, see Edelman [1987].) But unlike the study of the brain, Mead wrote, "it is absurd to look at the mind simply from the standpoint of the individual human organism." This is because "we must regard mind . . . as arising and developing within the social process." Human forms of cognition are characterized by a process in which the social mind compliments the biological brain: "The subjective experience of the individual must be brought into relation with the natural, sociobiological activities of the brain in order to render an acceptable account of mind possible at all; and this can be done only if the social nature of mind is recognized" (Mead 1934, p. 133). Mind, therefore, presupposes at least two brains. Mind supplements brain to the degree that an individual incorporates into his or her actions the point of view of another.

Can communication between a human and a machine therefore be considered mindful? Humans can, of course, put themselves in the place of a machine and identify with it, as was the case with Joseph Weizenbaum's (1976) ELIZA. Designed as a purely self-referential system, ELIZA is capable of asking questions of a subject—in the form of a therapeutic dialogue—simply by transforming the word order or form of the questions asked of it. Nonetheless, many individuals were moved by their therapeutic encounters with ELIZA to reflect and grow, which indicates something approximating Mead's (1934) triadic relationship between subject and object. Mindful interaction between a person and a computer therefore seemed to have taken place.

Even more interesting, however, are efforts by machines to take the position of individuals. Intelligent tutoring systems (ITS) are designed to

flag seemingly inappropriate questions from student programmers and then to check whether the programmer really want to ask them (Sleeman and Brown 1982; Sleeman 1983). It may be the case, for example, that the machine has assumed too much knowledge (or too little) on the part of the student programmer. Or it may be that the options presented to the programmer are too restricted. Under such conditions, ITS systems are capable of spotting errors by, in a sense, substituting themselves for the questioner. GUIDON, for example, was designed to supplement the medical diagnosis program MYCIN. By comparing a student's questions to those asked by MYCIN, the program can determine when the diagnosis being followed by the student is off track. GUIDON is also capable of analyzing the discourse patterns of the questions posed to it to see whether they are consistent with earlier questions (Clancey 1984). And, as the limits of GUIDON are reached, other programs—such as NEO-MYCIN, HERCULES, IMAGE, and ODYSSEUS—have been developed to further refine ITS possibilities. (For an overview, see Wenger [1987], pp. 271–83.) It is even possible to design a program, such as TALUS, that can debug other programs such as LISP (Murray 1988). If the Meadian concept of mind is based solely on the ability to take the point of view of another, including another program, these programs would also appear to possess mind.

But there is more to the Meadian analysis than reflection by putting oneself in the place of another. The second Meadian distinction is between the body and the self. What enables a physical body to become a social self is the possibility for an interaction with another social self. Since “selves can only exist in definite relationships to other selves” (Mead 1934, p. 164), qualities of mind exist instead when a gesture “has the same effect on the individual making it that it has on the individual to whom it is addressed” (Mead 1934, p. 46). No individual can therefore possess reflective intelligence—that is, be viewed as having a mind—without another individual also possessing a mind. Mead's formulation is thus the converse of the Turing test: the other must itself be a self before a self can communicate with it. Human cognition, because it requires that we filter our thoughts through the way we anticipate that other human beings will receive them, is therefore distinct from any other kind of cognition.

The distinction between a social mind and a biological brain is somewhat arbitrary. There are neurobiologists who argue for the existence of a “social brain,” in the sense that many activities studied by sociologists, such as religious belief, can be explained by pure neurological functioning (Garrazzina 1985). On the other hand, there are theorists in cognitive science who argue that we have a “cognitive mind,” that thought has its own language, so that qualities of mind do not lie, as Mead argued,

in things external to it (Fodor 1975, 1981a; for a sociological critique, see Coulter [1983, 1985]). Some work in AI even suggests that there is no distinction between mind and brain at all, but only something called "mind-brain" (Churchland 1986). Still, the distinction between mind and brain as suggested by Mead can help formulate some of the issues at stake in the claim that AI can model human intelligence.

The possibility that machine intelligence could replicate the human brain is primarily a technological question, a matter of engineering. Since the brain is composed of a series of neural nets, it ought, in principle, to be possible to develop a machine capable of equaling, or perhaps someday surpassing, the information capacity of human brains. We could thus conclude that if a machine (or series of machines) were capable of processing information faster and more efficiently than a human, the hypothesis that the brains of humans are superior to those of all other species would have to be rejected.

But the possibility of a machine replicating the human mind raises a different and more complicated set of issues. If we use Mead's distinction between mind and brain, the possibility of a machine replicating the human mind is foreclosed by definition, since at least two human selves have to be involved in an interaction, according to Mead, to define it as mindful. In that sense, our test is "rigged." There are good grounds nonetheless for using Mead's distinction to examine the kind of mindful intelligence a machine would have to at least approximate for its intelligence to be compared with human intelligence. For if human selves make sense of the world by sharing impressions with other human selves—and therefore interpret the rules by which people govern themselves—it becomes possible to understand why humans are capable of accomplishing certain tasks even if their brains may have less pure computational power than the artificial brains existing in machines. The question, in this sense, is not whether machine brains are superior to human minds or vice versa. Rather, the biological brain and the social mind work in radically different ways: one seeks information as complete and precise as possible; the other does not need hardwired and programmed instructions—or even trial-and-error learning through the strengthening of neural nets—because it can make sense out of ambiguity and context.

III. SOFTWARE APPROACHES TO AI

Work in AI is generally divided into two approaches: software and hardware. A software approach is one that tries to reproduce what the brain does without entering into the question of how the brain does it. Hardware approaches to AI reject an analogy with the computer and try to

model intelligence and learning in machines by imitating the neurological structure of the brain.

Early work in AI proceeded along both approaches, but it was not long before the hardware efforts represented by Frank Rosenblatt (1962) and his ideas about "perceptrons" gave way to software approaches that seemed to offer promising payoffs (Minsky and Papert 1969). These approaches assumed that the brain possessed a central processing unit (CPU) that stored information in the form of memory. The von Neumann architecture of a computing machine could therefore attempt to replicate this structure, with software providing access to the CPU in the way it was assumed that events in the real world stimulated the memory recall operations of human brains. The beauty of this approach was that it was irrelevant whether the computer actually did model the human brain. If a program could be written that could represent reality, then intelligence lay in the application of instructions or algorithms (Minsky 1981). Only one assumption was necessary for this procedure to work, and that was that a complete set of instructions could be provided. As von Neumann put it, "Anything that can be exhaustively and unambiguously described . . . is . . . realizable by a suitable finite neural network" (cited in Gardner 1985, p. 18). Many researchers in AI are convinced that even the world of everyday life—of metaphor and ambiguity, for example—can be programmed into formal rules that a machine can understand, if only we specify them in all their complexity (Hobbs and Moore 1985).

If memory were infinite, as it could be imagined in the purely abstract theories of Alan Turing (1950), machines would simply take as long as is needed to find the information relevant to an instruction, even if the time to do so were, say, the equivalent of three human lifetimes. But in the real world, software approaches to AI rapidly ran up against the obstacle that the reality outside the computer was more complicated than anyone had realized. Some indirect way to represent reality, therefore, became the objective. Some attempted to create "expert systems," in which programs were based on a model of the decision-making process used by experts in various areas (Newell and Simon 1972; Feigenbaum and Feldman 1963). So long as they confined themselves to relatively limited domains of rule application, expert systems were a major success, especially with the creation of DENDRAL and MYCIN for medical diagnosis. They can even, as we have already seen, be expanded to guide the questions asked of them by programmers. Such successes have led researchers within this tradition back to efforts at more general programs, such as Allen Newell's attempt to create a unified theory of cognition (Waldrop 1988b), but, although such efforts have generated a good deal of excitement, their potential lies in the future.

Another way to get around the problem of representing reality was to take certain shortcuts, to assume that although reality outside the machine was enormously complicated, it could be broken down into smaller categories that were less complicated and then such smaller units could be combined. Minsky (1981), for example, argued for "frames" (a term sociologists recognize from Goffman [1974]), while Roger Schank talked about the existence of scripts (Shank and Abelson 1977). No one was willing to reject the CPU metaphor, but they did recognize that holding information about everything that ever happened throughout a lifetime would require an unwieldy human CPU, so memory was assumed to be stored by humans in the form of episodes. Each set of generalized episodes could be called a script. There was, for example, Schank's famous example of a restaurant script, a set of associations in the brain about what happens to an individual on entering a restaurant, within which any particular experience in a real-world restaurant can be framed (Schank and Abelson 1977).

Schank's ideas about scripts were subjected to one of the most searing critiques in the AI literature: Searle's (1981) effort to prove that machines cannot "understand" the instructions given them. The implication of Searle's "Chinese room" critique was that, while human intelligence might be replicated, there could not be any artificial, functional equivalent of human understanding. In the absence of this human capacity to understand, not even frames and scripts could avoid the problem that, to know anything, the machine first had to know everything (Rosenfield 1988, p. 113). No wonder that many of the early criticisms of work in the area were directed primarily against software approaches (Dreyfus 1979; Weizenbaum 1976). Even AI researchers themselves began to look for another approach, one based more directly on the "hardware" of the human brain.

As these examples illustrate, the development of AI raised new and important questions not only about machines but also about humans. If machines have trouble representing reality outside themselves, how do humans do it? Humans, like machines, can also be given rules that they are expected to follow. But since our memories are imperfect, it would be difficult to conclude that our rules can also be programmed in detailed specificity if the same technique did not work for computers. Work in AI stimulated neuroscientists to take a closer look at the human brain, and what some of them discovered was that the whole idea of a human CPU had to be rejected (Edelman 1987; Reeke and Edelman 1988; Rosenfield 1988). This position—associated with those who reject neurological theories (dominant since Broca) that different local sectors of the brain are responsible for different functions—offers instead what Edelman calls a nonalgorithmic understanding of the brain (1987, p. 44) or, more

accurately, of brains, for Edelman's argument is that different brains develop differently in the form of a selective system, just as certain species are understood by Darwinian theory to evolve in response to new challenges. Humans have, in other words, what Edelman called a "mindful brain" (Edelman and Mountcastle 1978), which software approaches, dependent purely on algorithms, cannot have.

But if human memory is not stored somewhere, how do we, in any particular circumstance, know what to do? Putting the issue in another form, if it is true, as one neuroscientist argues, that "we are probably much better at recognition than we are at recollection" (Rosenfield 1988, p. 158), what we need to understand is not how human memory is stored but how it is activated. The answer may very well lie in the Meadian distinction between mind and brain. Humans have minds that are capable of interpreting rules and instructions: we fill in the frames or interpret the scripts, not just search through memories to match a representation to a reality, because our minds recognize the external reality that our brains cannot.

If this line of reasoning is correct, it would follow that the human brain, unlike machine brains, can be incomplete, that our brains do not need to understand everything with which they are presented because we also have minds that interpret the world for our brains. What we therefore need to recognize, and what work in AI unintentionally seems to show, is that humans are distinct, not because their brains store *more* information than machines, but because they can store *less* and get away with it. Our distinctiveness, in short, lies in the *unknowability* of the world around us to the brain within us.

Confirmation for the neurological notion that human brains process information, but need minds capable of supplying context, is provided by the ethnomethodological tradition in sociology. For Garfinkel (1967), for example, conversations are interesting not for what is said but for what is not said. Thus the words, "Dana succeeded in putting a penny in a parking meter today without being picked up," might be difficult for a computer to process because it would not know whether Dana was being lifted up to the parking meter or had not yet been met by his parents in their car. But even if a "natural" language program had anticipated this problem and could reject the incorrect meaning of "pick up" in favor of the correct one, it would be unlikely to interpret the sentence to mean what one of Garfinkel's students assumed it to mean: "This afternoon as I was bringing Dana, our four-year-old son, home from the nursery school, he succeeded in reaching high enough to put a penny in a parking meter when we parked in a meter parking zone, whereas before he has always had to be picked up to reach that height" (Garfinkel 1967, p. 38).

Research into human conversations, which was stimulated by Garfinkel, illustrates the difference between how human minds and machine brains talk. Although there are researchers who find in conversation analysis a method for understanding how machines and humans can better talk to one another (Good 1985; McTear 1985), the whole point of ethnomethodology is to analyze how people themselves develop the rules that structure what they do. Thus, as only one example, Schegloff and Sacks (1979) show how something as seemingly obvious as the closing of a conversation is in fact a socially negotiated process between the speakers. If it is true that "there are possibilities throughout a closing, including the moments after a 'final' good-bye, for reopening the conversation" (p. 262), then human agency is always a third party to talk between two human beings. It thereby follows, as Scheff (1986) has argued, that direct and exact translations between natural languages and computer languages will never be possible, since human language production, like all human activities, presupposes a "micro-world underlying all social interaction, [which] connects individuals in shared meanings and feelings, and also connects them to the social structure of their society" (Scheff 1986, p. 82).

In a similar manner, although Bateman (1985) has pointed out that nearly all of Alfred Schutz's (1967, pp. 80-81) concepts can be translated into AI concepts—that Schutz's phrase "stock of knowledge," for example, is the same as Minsky's (1981) frames or Schank's scripts (Schank and Abelson 1977)—the ethnomethodological impetus would seem to lead to an appreciation of how plastic our tacit understandings of the world tend to be. Schutzian phenomenology fills in the gaps that a formal analysis of grammatical rules can never fill: the everyday world provides the background or tacit knowledge that makes it possible to act in a contingent world, to act, as Dreyfus (1979) puts it, without a theory of how we act. Tacit knowledge, background assumptions, and practical reasoning are all features of mind that enable individuals to be rule-governed creatures even if they do not know what all the possible rules may be. The Wittgensteinian regress—the notion that the specification of any set of rules always contains a *ceteris paribus* condition that cannot be understood within the terms of the rules specified (Dreyfus 1979, pp. 56-57)—while always a logical problem, rarely becomes a practical human problem. We can define the situation because the situation is not defined. We can construct meaning because the meaning is not known. Having gone through a period in which it tried to escape from ambiguity, sociological theory is coming to appreciate it, in part, as Levine (1985, p. ix) states, because of "the recent ascendancy of computerized thought-ways." Ambiguity is essential to human communication—as well as to other types of human behavior—because it is precisely through the gaps

in our ability to communicate through language exactly what we mean that the social order exercises its ability to bind us together in realms of shared meaning.

The differences between the knowing brain and the unknowing mind are illustrated by one of the activities that both machines and humans periodically undertake: playing chess. As Georg Simmel once pointed out, in a metaphor exceptionally appropriate to the age of AI, there are two conditions that would inhibit an individual from playing a game of chess. One is not knowing any moves. The other is knowing all the moves (cited in Heritage 1984, p. 61). Chess-playing programs developed by AI researchers cannot specify all moves; that is why heuristic rules were developed that eliminate nonsensical moves, making it possible for computer programs in the real world to play exceptionally expert chess. Yet let us grant one assumption of science, that, if something is theoretically possible, we can imagine it to be practically possible. When the perfect chess program is developed, the result is to stop "playing" chess: when all moves are known, it can no longer be a game. A minimal condition for gaming, as Erving Goffman once pointed out, is that "a prior knowledge of the players will not render the outcome a foregone conclusion." What makes a game a game is that interaction has taken place: "The developing line built up by the alternating, interlocking moves of the players can thus maintain sole claim upon the attention of the participants, thereby facilitating the game's power to constitute the current reality of its players and to engross them" (1961, p. 67). Winning games is something our brains do; playing them is something our minds do. (That people both play and play to win only means that they have both minds and brains.)

There would be no need for mind if, not only in the playing of chess but in all other human activities as well, human agents acted with complete knowledge of the consequences of their acts. If the self knows the consequences that will follow from any gesture, speech act, or form of behavior, it will no longer be a self.² Human forms of learning grow out of the uncertainty of what we do, leading us to rely on social practices, the cues of others, experience, definitions of the situation, encounters, norms, and other ways of dealing with uncertainty that enable mind to develop. One of the leading German philosophical anthropologists, Arnold Gehlen (1988, pp. 79–92), argued that because humans are more imperfect than

² As Turkle has written, "If mind is a program, where is the self? . . . In its challenge to the humanistic subject, AI is subversive in a way that takes it out of the company of rationalism and puts it into the company of psychoanalysis and radical philosophical schools such as deconstructionism. . . . Artificial intelligence is to be feared as are Freud and Derrida, not as are Skinner and Carnap" (1988, p. 245)

other animal species in their gestation periods—they remain infants far longer than other creatures do—their specific traits develop out of their need to compensate for the lack of what nature has given them. The same can be said for their brains. Imperfect, trial-and-error bound, hesitant—the human brain is incomplete in the absence of a social mind. It may therefore be the case that someday a computer will surpass any one particular human brain in its intelligence (although none have come even close so far), but what a computer is unlikely to surpass is the collective intelligence of assembled minds. We are not sure how we comprehend the world outside our brains, but we are fairly certain that we do not do it through a detailed set of algorithms specified in software or its functional equivalent.

IV HARDWARE APPROACHES TO AI

The past few years have seen, within the AI community, a revival of hardware efforts, once associated with Frank Rosenblatt (1962) and his notions about perceptrons, now called parallel distributive processing (PDP), neural nets, or connectionism (see, e.g., Grossberg 1988; Hinton and Anderson 1981; Rumelhart et al. 1986; Mead 1988). Rather than model how a brain decides without entering into the way it decides, these efforts use certain understandings of neurological behavior to develop analogous data-processing systems (Mead 1988). Because the brain works so much faster than computers, these thinkers argue, it must be composed of many computational devices working in parallel fashion. And because the brain does not necessarily store its memory in specific locations, waiting to be activated by signals that enter the system, its architecture is better viewed as a series of nets activated by the connections that exist between them. In that sense, PDP approaches circumvent the most conspicuous flaw of earlier efforts, the use of a von Neumann machine instead of the brain itself as a model for human intelligence: "One important difference between our interpretation of schemata and the more conventional one is that in the conventional story, schemata are stored in memory. Indeed, they are the major *content of memory*. In our case, *nothing stored corresponds very closely to a schema*. What is stored is a set of connection strengths which, when activated, have implicitly in them the ability to generate states that correspond to instantiated schemata" (Rumelhart et al. 1986, p. 21; emphasis in original).

Two important considerations follow from this major shift in emphasis. One concerns rules and scripts. Researchers in the PDP tradition "do not assume that the goal of learning is the formation of explicit rules. Rather, we assume it is the acquisition of connection strengths which allow a network of simple units to act *as though* it knew the rules"

(McClelland et al. 1986, p. 32; emphasis in original). It follows that the machine—more accurately, in this kind of work, a set of parallel machines—can “learn,” because it can react to ambiguous or incomplete instructions. While researchers in this tradition are cautious about making large claims for their work, they are convinced that machines can reproduce the human capacity to act in particular ways on the basis of past experience.

One example provided by researchers in this tradition helps illustrate what is new about this approach when compared to older forms of AI work. Suppose that a child is in the process of learning the past tense. The general rule is that we take the present tense and add “-ed.” Following this rule, a naive subject would reason as follows:

jump	jumped
walk	walked
come	comed

To respond to such a difficulty, earlier research in AI would have begun a search for all exceptions to the general rule, specifying them as precisely as possible so that a machine would know, if asked to give the past tense of a verb, how to respond. But PDP works in the opposite way. It begins with what the naive subject would do, makes a mistake, corrects the mistake, and accumulates in the process enough associations that it eventually comes to learn when an “-ed” ought to be added and when some other form of the past tense is correct (McClelland et al. 1986, pp. 39–40). In short, the reasoning here is trial-and-error reasoning and is, in that sense, similar to the way humans think.

If software approaches to AI located intelligence in a set of instructions to a CPU, hardware approaches locate intelligence in a set of procedures that can activate connections. “Under this new view, processing is done by PDP networks that configure themselves to match the arriving data with minimum conflict or discrepancy. The systems are always taming themselves (adjusting their weights). Learning is continuous, natural, and fundamental to the operations” of a system (Norman 1986, p. 544). It is clear that, with the use of PDP methods, machines can adjust to unforeseen instructions, which they were not able to do under software conditions (although this ability to adjust is limited to certain rather artificial situations). Still, our concern in this article is not whether machines can “learn” but whether the way they respond to instructions has anything to tell us about the way human beings learn and respond to instructions.

At issue is the way that “learning” organisms relate parts to wholes. One of the root assumptions in AI research is that intelligence is mani-

fested when enough very small bits of information are assembled together into something called knowledge. Working with the philosophical tradition inspired by Descartes and Hume, AI researchers believe that understanding the mechanics of neural networks enables us to solve what Hume called the problem of the homunculi, which asserts that it is impossible to understand what takes place in the brain by imagining that a little person exists inside of it giving it instructions, for then we would have to posit a little person inside the brain of the little person, and so on, in an infinite progression (Dennett 1978, p. 123; Pylyshyn 1981, p. 68, Edelman [1987, p. 45] believes his understanding of neuronal selection also solves the homunculi problem). Because workers in the PDP tradition look not at whole scripts but at *subsystems*, at the smallest units of communication possible, they respond to the Humean problem by fashioning a smart machine out of exceptionally dumb—indeed, the dumber the better—components.

Homunculi are *bogeymen* only if they duplicate *entirely* the talents they are rung in to explain. . . . If one can get a team or committee of *relatively* ignorant, narrow-minded, blind homunculi to produce the intelligent behavior of the whole, this is progress. . . . Eventually this nesting of boxes within boxes lands you with homunculi so stupid (all they have to do is remember whether to say yes or no when asked) that they can be, as one says, "replaced by a machine." One *discharges* fancy homunculi from one's scheme by organizing armies of such idiots to do the work. [Dennett 1978, pp. 123–24; emphasis in original]³

As Douglas Hofstadter (1979) has put it, the paradox of AI is that "the most inflexible, desireless, rule-following of beasts" can produce intelligence (p. 26). They can, at least if one defines intelligence in ways compatible with AI's emphasis on the parts adding up to a whole. But what if human intelligence is otherwise, that is, what if our way of thinking and learning involves the continuous back and forth of wholes and parts?

It ought to be clear that the question of parts and wholes is a fundamental issue in sociological theory. Durkheim's notions about the division of labor—where each human agent, generally acting in ways unknown to other human agents, nonetheless contributes to the effective overall functional performance of the society—is but one formulation of an age-old problem of how parts and wholes interrelate. Durkheimianism, or any strong form of structuralist sociology, is an effort to understand how a smart organism—civilization or social structure—could emerge out of,

³ Dennett is not writing here about connectionist approaches but about AI in general. His remarks, nonetheless, are especially relevant to hardware approaches.

if not necessarily dumb, then at least somewhat limited components, that is, people. In relying on a biological metaphor as the basis for his functionalism, Durkheim envisioned society as composed of hearts, muscles, heads, and other organs—all of which have tasks to perform, but none, save perhaps the head, has much consciousness or awareness of why it is doing what it is doing. It was precisely this sense of structures operating because of their homeostatic functions—inherited by Parsons from Durkheim—that led microsociologists, especially Garfinkel and Goffman, to pay more attention to individual human minds.

Just as sociological theory was led to a greater appreciation of how micro and macro interrelate, work in AI is coming up against the limits of the notion that a focus on the smallest possible parts will tell us something about the behavior of the whole. Minsky (1986), for example, although once associated with software approaches to AI, has, like his colleague Seymour Papert (1988), become sympathetic to the new approaches associated with PDP and connectionism. He proposes that we answer the question of how dumb components can make a smart machine by asking us to imagine that intelligence is a “society” composed of agents—such as the comparing agent, the adding agent, the seeing agent—each of which is ignorant of what the other agents are doing: “Each mental agent by itself can only do some simple thing that needs no mind or thought at all. Yet because we join these agents in societies—in certain very special ways—this leads to true intelligence” (1986, p. 17). The overlap with Durkheim here is striking, and, as with Durkheim, the question becomes whether PDP approaches can enable us to focus on aggregates—what Minsky calls “societies”—without attributing significant intellectual qualities to the parts that compose those societies.

It is worth noting in this context that Minsky not only reaches for the metaphor of “society” to talk about the whole, but also the term “agent” to describe the part. One reason that the interaction between parts and the whole seems to work for human societies is that human beings clearly possess agency: they can shift their attention back and forth from parts to wholes because they are autonomous agents capable of thinking for themselves. (It is the recognition of the power of human agency that led sociological theory away from an overdetermining structuralism.) Can a machine premised on parts that are as dumb as possible in any way replicate the way real human agents operate in the world? Just as software approaches could have manifested intelligence resembling human intelligence if they could have overcome one fatal flaw—the need to specify descriptions of the real world as thoroughly and unambiguously as possible—the ability of the hardware approach to approximate human

learning hinges on one question as well: Does it make sense to apply the term agency to whatever is operating through a set of essentially dumb microprocedures that activate its states?

The role that agency plays in the case of human intelligence is underscored by the same neuroscientists who reject the CPU model of the human brain. True, they admit that the PDP approach is closer to what we know about how human brains work, yet they are by no means convinced that these new approaches will enable machines to model the brain (Reeke and Edelman 1988, p. 152). The reason has once again to do with the social nature of the human mind. Rosenfield (1988) has written that "the world around us is constantly changing, and we must be able to react to it . . . in a way that will take account of the new and unexpected, as well as our past individual experiences" (p. 8). The question, then, is how we come to "take account" of unexpected events. Rosenfield's view is in accord with the Meadian notion that because humans are meaning-producing creatures, their intelligence lies in their ability to interpret the meaning of the stimuli around them: "Fixed memory stores, we have already seen, cannot accommodate the factors of context and history. Computations—the use of procedures in a limited way—bring us closer to a better solution but still fail to explain a crucial aspect of our perceptual capabilities: how our past affects our present view of the world, and how our coordinated movements, our past and present explorations of the world, influence our perceptions" (p. 145).

The clear implication of the work described by Rosenfield is that human brains work the way they do because the signs they recognize are not merely representations of microparts but also interact with larger wholes in the culture outside of the brain. Human agency, in other words, is a central feature of human intelligence. The unit doing the thinking and learning must be capable of taking in the context of the whole if the parts are going to fit together in any coherent way. If this point of view is correct, then both PDP and connectionist approaches to AI must demonstrate that their machines can in some way model the human agent's capacity to understand the meaning of wholes before anyone can take the first step toward engineering a replica of the human brain. Yet, in the PDP view of things, it is precisely meaning that is sacrificed in order to specify microprocedures. As D. A. Norman (1986) puts it, "I believe the point is that PDP mechanisms can set up almost any arbitrary relationship. Hence, to the expert, once a skill has been acquired, meaningfulness of the relationships is irrelevant" (p. 544). Because "the interpretation of the process is *not* in terms of the messages being sent but rather by what states are active," it follows that "in general, *there is no single reason why any given cognitive state occurs*" (p. 546; emphasis in original). What we get in these approaches, even under the best of circum-

stances, is a machine that may resemble the human brain in an architectural sense but one still without the capacity of human brains to move backward and forward from microprocedures to macroawareness. These approaches come somewhat closer to what would be needed to reject the hypothesis of human distinctiveness but are still far from even the first stage of what would be needed to do so.

V CONCLUSION

The founders of sociological theory were stimulated to think about the specifically human features of their societies because the intellectual air around them was filled with Darwinian thoughts. Contemporary sociological theorizing, in a very similar way, is inevitably going to be affected by the revolution in computing that marks our own age. It ought to come as no surprise that "artificial intelligence . . . is beginning to tread in waters very familiar to sociologists, while sociologists could soon find some of the methods and concepts of AI provide a novel, but reliable approach to their subject" (Gilbert and Heath 1985, p. 1). While there are some who question the relevance of AI to sociology (Jahoda 1986; Woolgar 1985; Oldman and Drucker 1985), there have also been attempts to apply the insights of AI to such diverse topics as Goffmanesque dramatological models (Brent 1986), ethnomethodology (Good 1985; McTear 1985; Pateman 1985), sociolinguistics and social cognition (Bateman 1985), and the sociology of medicine (Gilbert and Heath 1985; Weaver 1986).

One indication of the impact of AI on sociological theory is the availability of the processing power of machines to serve as a model for all the complexities of human interaction in societies. Beniger, for example, has argued that, because "every living system must maintain its organization by processing matter and energy," it follows that "information processing and programmed decisions are the means by which such material processing is controlled in living systems, from macromolecules of DNA to the global economy" (1986, p. 59). But by far the sociological theorist most influenced by the cognitive revolution stimulated by computers is Niklas Luhmann (1982, 1989).

Like all great theorists in the sociological tradition, Luhmann seeks to answer the question, What makes society possible? Modern societies, more complex in their economic, legal, and technological density than any that came before, particularly raise the question of how they can possibly reproduce themselves. Imagining the world as a flux of potentialities existing through time in the manner similar to Schutz (1967), Luhmann argues that we can obtain a meaningful grasp on the world at any particular moment only by thinking of societies as organized by the

principle of "autopoiesis," or self-creation (Luhmann 1989; p. 17; see also Maturana and Varela 1987). "In the case of meaning-processing as well as living systems, autopoiesis has to be secured before all else. This means that the system exists if, and as long as, meaningful information processing is continued" (Luhmann 1989, p. 18).

An example of how information processing makes it possible to reduce complexity is provided by Luhmann's recent sociology of law (1989; see also the essays in Teubner [1987]). "Binary coding" is what makes self-referential systems possible. In the legal realm, for example, the binary code legal/illegal defines the entire realm of possibilities. "Since in any case only one of these two possibilities exists for the legal system—there is no third possibility—the schema contains a complete description of the world" (Luhmann 1989, p. 64). Since no binary code can change, however, all coding has to be supplemented by what Luhmann calls "programming." A program determines into which of the binary codes any particular act will fall. Thus *justice* is a programming category, while *legal* is a binary one. Legal regulation therefore occurs when the binary code generates a program that reflects back on itself, and so on, in the form of an eternally recurring braid. Society is possible because the whole system runs on its own:

This form of legal regulation can be proclaimed as the protection of freedom, indeed as the promise of freedom. Viewed more prudentially it is a matter of a specific technique for dealing with highly structured complexity. In practice this technique requires an endless, circular re-editing of the law: the assumption is that something will happen, but how it will happen and what its consequences will be has to be awaited. When these consequences begin to reveal themselves they can be perceived as problems and provide an occasion for new regulations in law itself as well as in politics. Unforeseeable consequences will also occur and it will be impossible to determine if and to what extent they apply to that regulation. Again, this means an occasion for new regulation, waiting, new consequences, new problems, new regulation, and so on. [Luhmann 1989, p. 66]

In Luhmann's work, we have a picture of society organized to deal with complexity just as machines are programmed to process complex amounts of information. Yet the problems revealed by work in AI ought to give pause to making the analogy too exact. One can assume, for example, that a legal system will work algorithmically: rules will be generated by inputs that will reflect back and modify the rules accordingly. Such a model, however, faces two problems. One is that even machines, as I have argued above, do not necessarily work algorithmically and, it has been recently argued, neither do even apparently rule-driven human activities such as mathematics (Penrose 1989). But even if a legal system did work algorithmically, or even approximately so, it

could only do so if the agents affected by the system were more or less automatic rule followers. Here the Meadian distinction between mind and brain becomes crucial. Brains, understood neurologically, can be imagined to be information-processing mechanisms that work by following programmed rules. But minds do not. What makes human intelligence different—and what therefore makes models of society based on analogies with the machine inappropriate—is that, in human societies, people alter the rules they are expected to follow by incorporating information from the contexts and situations in which they find themselves together with others.

The major differences between the way machines and humans relate to rules are summarized in table 1. The most extreme form of rule adherence is contained in the software approaches to AI, for there the rules are everything. The failure of such programs—or, more precisely, their success only on condition that heuristics, efforts to generalize about rules rather than to specify them, become the dominant way to realize them—indicates that concepts of agency based on the notion that an agent is an algorithmic rule follower and nothing else are impossible to conceive: here is where the Wittgensteinian regress will always assert itself.⁴ We must, at the very least, posit the possibility of exceptions to rules, as the hardware approach to AI does, thereby introducing what its advocates call learning. It is clearly possible, as connectionist approaches have demonstrated, to make machines that will follow rules, even when the rules are ambiguous or unspecified. (In the words of Terry Sejnowski, "It's not like we're throwing rules away. This is a rule-*following* system, rather than a rule-*based* system. It's incorporating the regularities in the English language, but without our having to put in rules" [cited in Allman 1989, p. 186].) But human minds do not merely follow rules; they also make them. There has not yet been developed a machine capable of making the rules it will then follow.

An emphasis on rules, in turn, raises the question of how they are transmitted. If we distinguish between representations that mean only what they mean and representations into which other meanings can be read—my approach to this long-debated issue will, following Pagels (1988, pp. 192–94), call the former signs and the latter symbols—then machines can read signs, whereas minds can interpret symbols. We recognize symbols as whole configurations and can disassemble them to account for their parts, while signs are the individual elements that to-

⁴ From an even more radically Wittgensteinian position, it is possible to challenge the notion that even the simplest machines following the simplest instructions are following rules, for the whole nature of what it means to follow remains problematic (see Shanker 1987)

TABLE 1
ARTIFICIAL AND HUMAN (SOCIAL) FORMS OF COGNITION

	ARTIFICIAL		SOCIAL
	Software	Hardware	
Locus	CPU	Neural nets	Mind
Relation to rules . . .	Rule following (algorithmic)	Rule excepting	Rule making
Language	Signs	Subsigns	Symbols
Meaning	Formal/notational	Procedural	Supplied

gether form a symbol. Given the complexity of their parts, symbols are open to interpretation; given the simplicity of their parts, signs are not. The meaning of a symbol does not exist within the symbol but has to be interpreted by the mind.

It is due to the difference between signs and symbols that machines and humans respond differently to questions of meaning. Meaning is formal and notational in some kinds of AI research, most especially those based on the software model. One searches for formal modes of expression that enable thoughts to be represented in terms of syntactical rules (or grammars) that can be rendered into computations. For this very reason, as Fodor writes, "the machine lives in an entirely notational world; all its beliefs are false" (1981*b*, p. 315). Fodor calls this "methodological solipsism"; machines process data *as if* there were referents in the real world to be interpreted, without, of course, ever interpreting them.⁵ The development of PDP models reinforces the point, for these versions of AI do not, as the software versions sometimes did, make the claim that they are representing the real world. They use the real-world structure of the human brain merely as a model for a machine. For them, meaning lies in the strengths of connections between nets and nowhere else. Such an approach makes possible a greater mechanical facility with machines, but it cannot duplicate the particular form of intelligence we associate with use of the mind.

If these differences are accepted, it follows that the hypothesis of human uniqueness need not be rejected as a result of AI. Because we can make "a principled distinction between the study of mind (as properly

⁵ This feature of AI research is elevated into a methodological principle by Dennett (1978, pp. 3-22), who argues that we can take an "intentional" stance toward machines, ascribing to them certain features without necessarily making an argument that they possess those features in reality.

conceived) and the study of brains and nervous systems" (Coulter 1983, p. 146), there still remain important differences between how people living in society think compared with how machines do. It follows as well that efforts to rely on AI understandings of cognition for models of how human societies work will miss the essential difference between human and other forms of intelligence. To be sure, systems approaches such as Luhmann's seem at first glance to receive support from the cognitive revolution associated with computers. Yet, far from equating the kinds of intelligence associated with all organic systems, AI, in an admittedly backhanded way, actually reinforces the hypothesis of human distinctiveness by calling attention to the ambiguity-resolving, incomplete, and meaning-dependent features of human minds. Work in AI stimulates sociological theorizing in many directions; those traditions with antisystematic inclinations—such as ethnomethodology and symbolic interactionism—receive just as much support from AI as those who would use what we have learned about machine behavior to model what we know about human behavior.

REFERENCES

- Allman, William F. 1989. *Apprentices of Wonder: Inside the Neural Network Revolution*. New York: Bantam.
- Bateman, John. 1985. "The Role of Language in the Maintenance of Intersubjectivity. A Computational Investigation." Pp. 40–81 in *Social Action and Artificial Intelligence*, edited by C. Nigel Gilbert and Christian Heath. Aldershot: Gower.
- Beniger, Joseph. 1986. *The Control Revolution. Technological and Economic Origins of the Information Society*. Cambridge, Mass.: Harvard University Press.
- Boden, Margaret. 1987. *Artificial Intelligence and Natural Man*, rev. and expanded ed. New York: Basic.
- Brent, Edward E., Jr. 1986. "Knowledge-based Systems: A Qualitative Formalism." *Qualitative Sociology* 9 (Fall): 256–82.
- Churchland, Patricia Smith. 1986. *Neurophilosophy: Toward a Unified Science of the Mind-Brain*. Cambridge, Mass.: MIT Press.
- Churchland, Patricia S., and Terrence J. Sejnowski. 1988. "Perspective on Cognitive Neuroscience." *Science* 242 (November 4): 741–45.
- Clancey, William J. 1984. "Use of MYCIN's Rules for Tutoring." Pp. 464–89 in *Rule-based Systems: The MYCIN Experiments of the Stanford Heuristic Programming Project*, edited by Bruce G. Buchanan and Edward H. Shortliffe. Reading, Mass.: Addison-Wesley.
- Coulter, Jeff. 1979. *The Social Construction of Mind*. London: Macmillan.
- . 1983. *Rethinking Cognitive Theory*. New York: St. Martin's.
- . 1985. "On Comprehension and 'Mental Representation.'" Pp. 8–23 in *Social Action and Artificial Intelligence*, edited by C. Nigel Gilbert and Christian Heath. Aldershot: Gower.
- Dennett, Daniel C. 1978. *Brainstorms: Philosophical Essays on Mind and Psychology*. Montgometry, Vt.: Bradford.
- Dreyfus, Hubert L. 1979. *What Computers Can't Do. The Limits of Artificial Intelligence*, rev. ed. New York: Harper Colophon.
- Durkheim, Émile. 1973. "The Dualism of Human Nature and Its Social Conditions."

- Pp. 149–63 in *Émile Durkheim on Morality and Society: Selected Writings*, edited by Robert N. Bellah. Chicago. University of Chicago Press.
- Edelman, Gerald M. 1987. *Neural Darwinism*. New York. Basic.
- . 1988. *Topobiology: An Introduction to Molecular Embryology*. New York: Basic.
- Edelman, Gerald M., and Vernon B. Mountcastle. 1978. *The Mindful Brain. Cortical Organisation and the Group-Selective Theory of Higher Brain Function*. Cambridge, Mass.: MIT Press.
- Elias, Norbert. 1978. *The Civilizing Process*. New York: Urizen.
- Epstein, Cynthia. 1988. *Deceptive Distinctions: Sex, Gender, and the Social Order*. New Haven, Conn.: Yale University Press.
- Feigenbaum, Edward A., and J. Feldman. 1963. *Computers and Thought*. New York: McGraw-Hill.
- Feigenbaum, Edward A., and Pamela McCorduck. 1983. *The Fifth Generation: Artificial Intelligence and Japan's Computer Challenge to the World*. Reading, Mass.: Addison-Wesley.
- Fodor, Jerry. 1975. *The Language of Thought*. New York: Crowell.
- . 1981a. *Representations: Philosophical Essays on the Foundations of Cognitive Science*. Cambridge, Mass.: MIT Press.
- . 1981b. "Methodological Solipsism." Pp. 307–38 in *Mind Design*, edited by John Haugland. Montgometry, Vt.: Bradford.
- Gardner, Howard. 1985. *The Mind's New Science: A History of the Cognitive Revolution*. New York. Basic.
- Garfinkel, Harold. 1967. *Studies in Ethnomethodology*. Englewood Cliffs, N.J.: Prentice-Hall.
- Gazzaniga, Michael S. 1985. *The Social Brain*. New York. Basic.
- Gehlen, Arnold. 1988. *Man: His Nature and Place in the World*, translated by Clare McMillan and Karl Pillemer. New York. Columbia University Press.
- Gerth, Hans, and C. Wright Mills. 1958. *From Max Weber. Essays in Sociology*. New York: Oxford University Press.
- Gilbert, C. Nigel, and Christian Heath. 1985. "Introduction." Pp. 1–7 in *Social Action and Artificial Intelligence*, edited by C. Nigel Gilbert and Christian Heath. Aldershot: Gower.
- . 1986. "Text, Competence, and Logic: An Exercise." *Qualitative Sociology* 9 (Fall): 215–36.
- Goffman, Erving. 1961. *Encounters: Two Studies in the Sociology of Interaction*. Indianapolis: Bobbs-Merrill.
- . 1974. *Frame Analysis*. Cambridge, Mass.: Harvard University Press.
- Good, David. 1985. "Sociology and AI. The Lessons from Social Psychology." Pp. 82–103 in *Social Action and Artificial Intelligence*, edited by C. Nigel Gilbert and Christian Heath. Aldershot: Gower.
- Greenberg, David. 1988. *The Construction of Homosexuality*. Chicago. University of Chicago Press.
- Grossberg, Stephen. 1988. *Neural Networks and Natural Intelligence*. Cambridge, Mass.: MIT Press.
- Heritage, John. 1984. *Garfinkel and Ethnomethodology*. Cambridge. Polity.
- Hinton, Geoffrey E., and James A. Anderson, eds. 1981. *Parallel Models of Associative Memory*. Hillsdale, N.J.: Erlbaum.
- Hobbs, Jerry R., and Robert C. Moore, eds. 1985. *Formal Theories of the Common-sense World*. Norwood, N.J.: Ablex.
- Hofstadter, Douglas R. 1979. *Gödel, Escher, Bach: An Eternal Golden Braid*. New York: Basic.
- Honneth, Axel, and Hans Joas. 1988. *Social Action and Human Nature*. Cambridge: Cambridge University Press.

- Jahoda, Marie. 1986. "Artificial Intelligence. An Outsider's Perspective." *Science and Public Policy* 13 (December): 333-40.
- Karelis, Charles. 1986 "Reflections on the Turing Test." *Journal for the Theory of Social Behaviour* 16 (July): 161-72.
- Levine, Donald N. 1985. *The Flight from Ambiguity: Essays in Social and Cultural Theory*. Chicago: University of Chicago Press.
- Luhmann, Niklas. 1982. *The Differentiation of Society*, translated by Stephen Holmes and Charles Larmore. New York: Columbia University Press.
- . 1989. *Ecological Communication*, translated by John Bednarz, Jr. Chicago: University of Chicago Press.
- McClelland, J. L., D. E. Rumelhart, and G. F. Hinton. 1986. "A General Framework for Parallel Distributive Processing." Pp. 45-76 in *Parallel Distributed Processing: Explorations in the Microstructure of Cognition*, vol. 1: *Foundations*, edited by David D. Rumelhart, James L. McClelland, and the PDP Research Group. Cambridge, Mass.: MIT Press.
- McCorduck, Pamela. 1981. *Machines Who Think*. San Francisco: W. H. Freeman.
- McTear, Michael. 1985. "Breakdowns and Repair in Naturally Occurring Conversation and Human-Computer Dialogue." Pp. 104-23 in *Social Action and Artificial Intelligence*, edited by C. Nigel Gilbert and Christian Heath. Aldershot: Gower.
- Maturana, Humberto R., and Francisco J. Varela. 1987. *The Tree of Knowledge: The Biological Roots of Human Understanding*. Boston. New Science Library.
- Mead, Carver. 1988. *Analog VLSI and Neural Systems*. Reading, Mass.: Addison-Wesley.
- Mead, George Herbert. 1934. *Mind, Self, and Society*. Chicago: University of Chicago Press.
- Minsky, Marvin. 1981 "A Framework for Representing Knowledge." Pp. 95-128 in *Mind Design*, edited by John Haugland. Montgometry, Vt. Bradford.
- . 1986. *The Society of Mind*. New York: Simon & Schuster.
- Minsky, Marvin, and Seymour Papert. 1969. *Perceptrons*. Cambridge, Mass.: MIT Press.
- Moravec, Hans. 1988. *Mind Children: The Future of Robot and Human Intelligence*. Cambridge, Mass.: Harvard University Press.
- Murray, William R. 1988. *Automatic Program Debugging for Intelligent Tutoring Systems*. Los Altos, Calif.: Morgan Kaufmann.
- Newell, A., and Herbert A. Simon. 1972. *Human Problem Solving*. Englewood Cliffs, N.J.: Prentice-Hall.
- Norman, D. A. 1986 "Reflections on Cognition and Parallel Distributive Processing." Pp. 531-52 in *Parallel Distributed Processing: Explorations in the Microstructure of Cognition*, vol. 2: *Psychological and Biological Models*, edited by David D. Rumelhart, James L. McClelland, and the PDP Research Group. Cambridge, Mass.: MIT Press.
- Oldman, David, and Charles Drucker. 1985. "The Non-reducibility of Ethnomethods: Can People and Computers Form a Society?" Pp. 144-59 in *Social Action and Artificial Intelligence*, edited by C. Nigel Gilbert and Christian Heath. Aldershot: Gower.
- Pagels, Heinz. 1988. *The Dreams of Reason*. New York. Simon & Schuster.
- Papert, Seymour. 1988. "One AI or Many?" *Daedalus* 117:1-14.
- Pateman, Trevor. 1985. "Using and Defending Cognitive Theory." Pp. 24-39 in *Social Action and Artificial Intelligence*, edited by C. Nigel Gilbert and Christian Heath. Aldershot: Gower.
- Penrose, Roger. 1989. *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics*. New York. Oxford University Press.
- Pylyshyn, Zenon W. 1981. "Complexity and the Study of Artificial and Human Intelli-

- gence." Pp. 67-94 in *Mind Design*, edited by John Haugland. Montgometry, Vt. Bradford.
- Reeke, George N., Jr., and Gerald M. Edelman. 1988. "Real Brains and Artificial Intelligence." *Daedalus* 117:143-73.
- Rosenblatt, Frank. 1962 *Principles of Neurodynamics*. New York. Spartan.
- Rosenfield, Israel. 1988. *The Invention of Memory: A New View of the Brain*. New York. Basic.
- Rumelhart, D. E., P. Smolensky, J. L. McClelland, and G. E. Hinton. 1986. "Schematic and Sequential Thought Processes in PDP Models." Pp. 7-57 in *Parallel Distributed Processing: Explorations in the Microstructure of Cognition*, vol. 2: *Psychological and Biological Models*, edited by David D. Rumelhart, James L. McClelland, and the PDP Research Group. Cambridge Mass.. MIT Press.
- Schank, Roger C., and Robert P. Abelson. 1977. *Scripts, Plans, Goals, and Understanding*. Hillsdale, N.J. Erlbaum.
- Scheff, Thomas J. 1986 "Micro-linguistics and Social Structure. A Theory of Social Action." *Sociological Theory* 4 (Spring) 71-83.
- Schegloff, Emmanuel, and Harvey Sacks. 1979 "Opening Up Closings." Pp. 233-64 in *Ethnomethodology. Selected Readings*, edited by Ray Turner. Baltimore: Penguin.
- Schutz, Alfred. 1967. *The Phenomenology of the Social World*. Evanston, Ill.. Northwestern University Press.
- Searle, John R. 1981. "Minds, Brains, and Programs." Pp. 282-306 in *Mind Designs*, edited by John Haugland. Montgometry, Vt. Bradford.
- Shanker, S. G. 1987. "Wittgenstein versus Turing on the Nature of Church's Thesis." *Notre Dame Journal of Formal Logic* 24, no. 4 (October): 615-49
- Shannon, Benny. 1989 "A Simple Comment regarding the Turing Test." *Journal for the Theory of Social Behaviour* 19 (July): 249-56.
- Simon, Herbert A. 1969. *Sciences of the Artificial*. Cambridge, Mass. MIT Press.
- Sleeman, Derek. 1983. "Inferring Student Models for Intelligent Computer-aided Instruction." Pp. 483-506 in *Machine Learning: An Artificial Intelligence Approach*, edited by Ryszard S. Michalewski, Jaime G. Carbonell, and Tom M. Mitchell. Palo Alto, Calif.: Tioga.
- Sleeman, Derek, and John Seely Brown. 1982 "Intelligent Tutoring Systems. An Overview." Pp. 1-11 in *Intelligent Tutoring Systems*, edited by Derek Sleeman and John Seely Brown. New York: Academic Press.
- Teubner, Gunther. 1987. *Autopoietic Law: A New Approach to Law and Society*. New York: DeGruyter.
- Turing, Alan. 1950. "Computing Machines and Intelligence." *Mind* 49: 433-60.
- Turkle, Sherry. 1984. *The Second Self: Computers and the Human Spirit*. New York: Touchstone
- . 1988. "Artificial Intelligence and Psychoanalysis. A New Alliance." *Daedalus* 117:241-68
- Waldrop, M. Mitchell. 1988a. "Toward a Unified Theory of Cognition." *Science* 241 (July 1). 27-29.
- . 1988b. "Soar: A Unified Theory of Cognition?" *Science* 241 (July 15): 296-98
- Weaver, Robert R. 1986 "Some Implications of the Emergence and Diffusion of Medical Expert Systems." *Qualitative Sociology* 9 (Fall). 237-57
- Weizenbaum, Joseph. 1976. *Computer Power and Human Reason*. San Francisco. W. H. Freeman.
- Wenger, Etienne. 1987. *Artificial Intelligence and Tutoring Systems*. Los Altos, Calif.: Morgan Kaufmann.
- Woolgar, Steve. 1985. "Why Not a Sociology of Machines? The Case of Sociology and Artificial Intelligence." *Sociology* 19 (November). 557-72

Simmel and Parsons Reconsidered¹

Donald N. Levine

University of Chicago

Simmel and Parsons both formulated distinctive conceptions of sociology before executing their original sociological studies. These conceptions differed with regard to methods and to principles. Their divergences led Parsons to downplay Simmel's work, such that the relationship between Parsonian action theory and Simmelian sociology remains problematic to this day. A major divergence concerns the emphasis by Simmel on forms of interaction and the emphasis by Parsons on the substantive contents of action. This divergence remains even after one clarifies their respective presuppositions by differentiating variables that they confound. Both approaches remain viable, particularly if they incorporate certain criticisms with which each confronts the other.

When Talcott Parsons unveiled *The Structure of Social Action (Structure)* ([1937] 1968), he was seeking to replace two conceptions of the sociological tradition with a novel vision of that tradition. The first conception, then dominant in the United States, was epitomized in the influential text by Park and Burgess, *Introduction to the Science of Sociology* (1921). Deriving ultimately from Comte, their account told the story of the discipline as a progressive displacement of vague, speculative ideas about social phenomena by precisely observed and rigorously represented facts. In the memorable words of Park and Burgess, "the period of the 'schools' " was giving way to "the period of investigation and research," and so "the first thing that students in sociology need to learn is to observe and record their own observations" (1921, pp. 44, v).

A contrasting view appeared seven years later in Pitirim Sorokin's *Contemporary Sociological Theories* (1928). Although Sorokin agreed that the scholar's primary task is "to deal with facts rather than theories," he nonetheless deemed it crucial to offer the novice sociologist a reasoned inventory of the diverse schools of sociological theory, since

¹ An earlier version of this article was presented at the conference, "Georg Simmel e le origini della sociologia moderna," Trento, Italy, October 19–21, 1989. Requests for reprints should be sent to Donald N. Levine, Department of Sociology, University of Chicago, Chicago, Illinois 60637.

those theories had "been appearing like mushrooms after rain . . . [and] the field of sociology is overcrowded by a multitude of various and contradictory systems" (1928, pp. xvii, xix). Accordingly, Sorokin's pluralist account distinguished nine major schools and their numerous branches, thus representing a wide array of the (primarily European) authors whom Sorokin knew so well.

In countering these modes of representing the field, Parsons argued, against the empiricist approach, that rigorous observation could not suffice to establish a scientific discipline but that independently elaborated theoretical assumptions were also necessary. Against the kind of theoretical pluralism represented by his senior colleague Sorokin at Harvard, however, Parsons argued that the time had come to unify the divergent theoretical traditions in sociology behind a single theoretical scheme, one that could in fact be justified by purely scientific developments in the discipline during the previous half century.

So it was, as Jeffrey Alexander (1987) has colorfully characterized the effort, that Parsons sought to overcome the dilemma of having "a nation without a theory" and "theoretical traditions without a nation" (p. 21). Parsons sought to reconstruct European sociology by "providing a synthesis which would eliminate the warring schools which had divided it" (p. 21) and so provide American sociology with an intellectually respectable theoretical charter for its investigative activities.² In pursuit of this "ecumenical" ambition, Parsons aspired to develop "a theory to end all theories" (p. 238).

Although Parson's achievement in *Structure* must still be seen as substantial, his ecumenical aspiration was doomed to failure. On philosophic grounds alone this failure could have been predicted, indeed it was predictable on the basis of Parsons's own expressed assumptions about the independent variability of theoretical constructs and, later, of the culturally generated symbolic foundations of cognitive schemes. Historically, the failure was evident in *Structure's* strikingly partial account of the utilitarian tradition (Camic 1979); its inattention to the French tradition before Durkheim and to the entire American tradition; its highly selective appropriation of the work of Marx, Durkheim, and Weber; and its nearly complete neglect of the work of Georg Simmel.

Although many of these omissions could be attributed to ignorance, carelessness, or legitimate selective emphases, one must raise the question whether some of them reflected an early waning of the ecumenical impulse. Commenting on the vicissitudes of this impulse in his fine-grained interpretation of the Parsonian oeuvre, Alexander (1983) argues that Par-

² For extensive elaboration of the metaphor of Parsons's opus as a charter for sociology, see Camic (1989)

sons's later work—the development of interchange theory—represented his “final and most significant approach to theoretical ecumenicism, to his hope of producing a multidimensional and synthetic sociological theory”; but in fact it was with interchange theory that “Parsons turned decisively from ecumenicism to theoretical imperialism, from synthesis and bridge-building as a conscious theoretical strategy to the tactics of theoretical exclusivity” (Alexander 1983, pp. 152, 160). Whether or not that is so, we have ample documentation that the exclusionary tactic was already manifest at the time *Structure* was written. Just before publishing that work, Parsons made the decision to exclude a substantial essay on Simmel from his grand synthesis of the resources of classical theory.

As late as 1935, Parsons had expressed an intention to include Simmel in the grand synthesis, describing him as one of the three writers from the idealistic tradition, along with Weber and Tönnies, who had been “most important” in the evolution of his views (1935, pp. 282–83). He went on to draft a 16-page section on Simmel for inclusion in *Structure*. His decision not to publish that material reflected an exclusionary impulse that surfaced from two sources. For one thing, as Parsons recalled in a letter written a few months before his death, he had been engaged in a competition for the honor of being the principal importer of German sociology to the United States:

[Simmel's] position had been used as relatively few people are still aware as the takeoff point for an attempt to build social system theory which I considered to be fundamentally mistaken. This began in Germany with a large work by Leopold von Wiese, with the title, *Beziehungslehre*. This appeared somewhere near the time I was a student in Heidelberg. . . . It had a certain vogue there but the theme was taken up by the late Howard Becker. Becker built it into a large book which was an adaptation of the Wiese position and went under the title *Wiese-Becker*. Indeed, for a few years, Becker and I were rivals for the leadership of the introduction of German sociology into this country. If I played down Simmel, certainly Becker even more drastically played down Weber [Parsons 1979, pp. 1–2]

Beyond this concern for competitive advantage, Parsons apparently came to realize that, despite certain points of affinity with Simmel, their methodological and substantive differences proved to be so fundamental that it was not plausible to accommodate Simmel under his ecumenical umbrella. As Parsons acknowledged in the letter cited above, “The decision not to include [the section on Simmel] had various motives. . . . It is true that Simmel's program did not fit my convergence thesis” (Parsons 1979). In the unpublished material, Parsons indicated some aspects of their incompatibility by maintaining that Simmel's mode of abstraction was only descriptive, not analytic in the manner Parsons espoused, and consequently Simmel's “mode of abstraction . . . directly cuts across the

line of analysis into elements of action which has been our main concern" (Parsons 1936, p. 9). No less important, Parsons had come to affirm common values as the essential ingredient of social organization, not interaction as such—the more Simmelian notion that he had employed just a few years earlier, when he wrote: "By sociology, I should mean a science which studies phenomena specifically social, those arising out of the *interaction* of human beings as such, which would hence not be reducible to the 'nature' of those human beings" (Parsons 1932, p. 338; emphasis in original).³

Parsons's understanding that Simmel did not fit his convergence thesis had a number of serious consequences. For one, it freed him to pursue the grand design of his action theory without being encumbered by the complex issues that would have dogged him had he tried to incorporate Simmel's theory at that time. As I observed in 1957, Parsons's failure to devote substantial space to Simmel in *Structure* may have been "so much the better for sociology" since it gave Parsons more freedom to elaborate his coherent theoretic approach, while sparing Simmel's work the simplification that a Parsonian treatment at that time would undoubtedly have involved (Levine [1957] 1980, p. lxiii).⁴ At the same time, by posing as an authoritative reconstruction of the sociological tradition, *Structure* had the effect of establishing a new canon of sociological classics that excluded Simmel, thereby contributing to the eclipse of a major theorist who had been such a stimulating resource for American sociology during the earlier decades of this century (Levine et al. 1976). What is more, it set the pattern for Parsons's lifelong inattention to Simmel,⁵ thereby depriving him of numerous points of support and stimulation in direc-

³ For further specifying certain issues in terms of which Parsons related to Simmel, I am indebted to Jaworski (1990).

⁴ For a recent celebration of the sense in which Parsons's skewed historical reconstruction figures as an essential part of his brilliant theory building, see Alexander (1988b, 1989).

⁵ This is true despite the inclusion of five selections by Simmel in the two-volume compilation of classic writings on social theory that Parsons coedited with Edward Shils, Kaspar D. Naegele, and Jesse R. Pitts (1961). The point was later acknowledged by Parsons himself in his preface to the 1968 edition of *Structure*: "Along with the American social psychologists, notably Cooley, Mead, and W. I. Thomas, the most important single figure neglected in *The Structure of Social Action*, and to an important degree in my subsequent writings, is probably Simmel" (1968, p. xiv). As Victor Lidz, literary executor of the Parsons estate, observed in a letter about Parsons's subsequent inattention to Simmel, "My guess is that [Parsons] continued to feel, as he had argued in the Simmel-Toennies draft for *The Structure of Social Action*, that Simmel's theoretical method and . . . substantive theory diverged far enough from the stance of action theory as to make efforts to exploit convergences unfruitful" (personal communication).

tions where his later thinking ran parallel to Simmel's.⁶ Finally, this set the stage for the considerable divisiveness and not always fruitful controversy that afflicted postwar sociology, with the eruption of a plethora of warring schools, most of which shared two features: "a critical stance toward Parsonian theory, and a programmatic statement in which Simmel was hailed as a founding father" (Levine 1984, p. 361; 1985a, p. 124).⁷

In recent years the sociological community seems to have been returning to a more synthetic and ecumenical mode of theoretical work.⁸ Notable efforts have been made to integrate the Parsonian synthesis with ideas from two of the three main figures most conspicuously absent or underrepresented in *Structure*, Karl Marx (see, e.g., Gould 1987) and George Herbert Mead (see, e.g., Habermas 1987), as well as with post-Parsonian developments in American sociology (Alexander 1987). Yet the question of the relation of Simmel to Parsons remains nearly as problematic as it appeared when I first broached the matter more than three decades ago. This may be a propitious time to review the possibility of finding constructive ways to relate the legacies of Simmel and Parsons.

DIVERGENCES

The task of relating Simmel and Parsons proves particularly formidable because of one feature that the two theorists shared, a feature that distinguishes them from virtually all of the other originative sociologists. Most

⁶ For example, Simmel, like Parsons, was engaged in a lifelong quest to unite the traditions of naturalism and idealism; he provided an extensive elaboration of a problematic that Parsons would later take up in earnest, the character of money as a generalized symbolic medium of exchange, and pioneered the notion of viewing exchange as a paradigm for all social interaction; and he anticipated Parsons in arguing that self, society, and culture were to be distinguished as three distinct, irreducible modes of organizing human experience and that the concrete individual must be understood as a composite of psychological components, societal components, and ideal components.

⁷ These could be said to include Merton's emphases on middle-range theories, group structural properties, and sociological ambivalence, Coser's conflict theory; the exchange theories of Homans and Blau, Laumann's network theory; phenomenological sociology, following Schutz and Garfinkel, and Goffman's approach to symbolic interaction. Of course, the most prominent axis of divisiveness stemmed from the neo-Marxian camp. In Alexander's words, "the story of sociological theory after World War II is, in one sense, the story of the rise and fall of the 'Parsonian empire' " (1987, p. 281)—a fall occasioned by the rise of divergent positions that assaulted the hegemony of the Parsonian synthesis from different angles.

⁸ See Neil Smelser's recent observation: "It seems to me that this phase [of divisive disarray] now appears to be running its course, and that new signs of synthesis are appearing or are on the horizon" (1988, p. 2)

sociologists, as Raymond Aron has observed, "generally choose as their point of departure an analysis of the historical period to which they belong" (1968, p. 74).⁹ In striking contrast, both Simmel and Parsons took as their points of departure the strictly academic question of the proper aims and boundaries of a discipline of sociology before embarking on their substantive sociological studies. (To be sure, Simmel wrote a few topical essays before publishing *Über Soziale Differenzierung*, but these did not affect the way he came to conceive of sociology.) As a result, their epistemic divergences appear particularly formidable because they stem from deeply pondered and sharply articulated incommensurable presuppositions that protrude extensively in their substantive work, presuppositions that affected their choice of topics for investigation and their interpretations of social phenomena.

What are these incommensurable presuppositions? I would identify two above all: one a presupposition about method and one about principles of social reality. Let me begin with the difference of method.

From about 1933 onward, Parsons never deviated from the goal of formulating a general theory of action, a general theory based on the clear articulation of primary elements and the logical derivation of synthetic theorems from those elements.¹⁰ In his earliest phase, the elements in question were the structural elements of action: means, ends, conditions, and regulative norms. In his middle phase, the elements were the structural elements of action systems: motives, roles, and symbols. In his later phase, the elements were the functional requisites of action systems: adaptation, goal attainment, integration, and pattern maintenance. But in each phase, Parsons adhered to a program using antecedently defined elements to provide the starting points from which the general properties of action were derived. This type of method has been referred to as a logistic method.¹¹

⁹ That is, the programmatic ideas of most originaive sociologists took shape consequent to their engagement with substantive issues tied to diagnoses of their time. Thus, Comte started his sociology after diagnosing the intellectual and moral confusion of France during the Restoration, Tonnies, after observing the dissolution of communal forms of social organization; Durkheim, after confronting the problem of moral solidarity in modern societies; Weber, after confronting the forms of rationalization in the modern West; Pareto, after experiencing what he considered the poverty of rational liberalism; and Park, after grappling with the role of the news media in creating modern public opinion.

¹⁰ For the evolution of this aspiration in the thought of the young Parsons, see Camic (1991).

¹¹ The typology of methods I employ here derives from the work of Richard McKeon (e.g., 1951, [1952] 1990). For a recent creative exposition of this schema, see Walter Watson (1985). For a more extensive typology of epistemic approaches in the social sciences, see Levine (1986).

Simmel was no less consistent throughout his career in pursuing a radically different type of method. Rather than deriving synthetic theorems from primary elements, Simmel's approach was to identify some particular problem or phenomenal complex and to analyze its essential characteristics. This type of method has been termed problematic or analytic.¹² In contrast to the logistic method, which determines the properties of wholes from their elements—or the dialectic method, which determines the properties of parts by the wholes that encompass them—this method involves the reciprocal determination of parts by their wholes and of wholes by their parts. As Walter Watson has described the contrast, the problematic method “is distinguished from logistic because the elements of the whole are indeterminate until they are organized in the method, rather than being initially determinate so that the method can determine their consequences. . . . This method is distinguished from dialectic because the whole is what it is as the unity of its parts, as a unity of form and matter, rather than being what it is as a part of some larger whole. Its wholes are complete rather than partial” (1985, p. 91).

For Simmel, then, there were no determinate parts of action from which to generate a grand general theory. His goal was to create what Merton came to call “theories of the middle range,” not as stepping-stones to an ultimate goal of systematic general theory, but as ends in themselves, ways of identifying and analyzing phenomenal complexes that observers find of interest.¹³ He applied this method in quite different phenomenal domains or worlds—to different personality configurations, different kinds of cultural forms, and different kinds of social forms. Rather than reduce all of these formations to a single set of determining elements, he insisted that “form and content are but relative concepts. They are categories of knowledge used to master the phenomena, and to organize them intellectually, so that the same thing which in any one relation appears as form, as though it were looked at from above, must in another relation, where it is viewed ‘from below,’ be labelled content” (Simmel [1908] 1968, p. 331; translation in 1955, p. 172; translation modified).

Given Parsons's commitment to the very different orientation embodied in the logistic method, it is no surprise that he came to reject Simmel's

¹² In my dissertation I called this the method of “causal resolution.”

¹³ See Siegfried Kracauer's apt characterization of Simmel's method as a search for *Wesenszusammengehörigkeit* (1920–21) and Maria Steinhoff's depiction of it “In all his books . . . Simmel confronts directly the flow of life and, guided by certain cognitive intentions, singles out from its vast fullness individual problems which appear worthy of research, which he then analyzes inductively and *pushes forth in every single investigation to the ultimate layer of the problem*” (1925, p. 252; my emphasis).

proposal to base sociology on the study of social forms, on grounds similar to those he invoked when criticizing Weber—because such a methodology analyzes discrete ideal types instead of constructing a systematic theory based on analytic elements ([1937] 1968, p. 716). Thus, when examining particular phenomena such as friendship, law, or economic exchange, Parsons seeks to explain them in terms of their constitutive action elements or systemic functional components, whereas Simmel would seek to analyze their essential defining properties as distinctive types of human formation.

What I term principles here signifies an author's basic assumptions about how to represent (social) reality. For Simmel, the foundational notion is *forms of interaction*; for Parsons, *systems of action*. These divergent starting points generate two radically different ways to conceptualize social phenomena.

Both authors represent these starting points as instances of abstraction from the totality of observables. For Simmel, the universe consists of innumerable interactions of all sorts—among atomic particles, molecules, organisms, celestial bodies, and whatever. What “society” signifies is an abstraction, from the universe of all interactions, of those interactions that obtain among human beings. A second cut of abstraction separates the energy that drives those interactions from the structures that organize them. Humans come to interact on the basis of certain drives and for the sake of certain purposes. These motives constitute what Simmel calls the “contents” of interaction. The ways in which those interactions are organized constitute a second dimension of their existence, a dimension that he calls “forms.” Since the contents and forms of interaction vary independently, such that inquiries into their respective properties can be carried out separately, Simmel assigns to the discipline of sociology the task of identifying and analyzing the constitutive forms of interaction and to other disciplines the task of investigating the properties of their contents.

Although Parsons applauded Simmel's effort to fashion the discipline of sociology by means of a deliberate act of theoretical abstraction—acknowledging his as “perhaps the first serious attempt to gain a basis for sociology as . . . a special science” (1968, pp. 772–73)—for Parsons, the way to sociology begins with a different set of abstractions. His first abstraction is the domain of human actions, phenomena that are abstracted from the total universe of phenomena by virtue of possessing some sort of meaning or relevance to human goals and interests. (In later formulations, Parsons would define action as consisting of those aspects of human behavior that are involved in or controlled by culturally structured symbolic codes [1977, p. 230].) These meanings provide what Parsons calls an actor's orientations, and an organized plurality of orien-

tations of action constitutes a system of action. The second cut of abstraction for Parsons consists of the orientations that are rational, in the sense of adapting to life conditions and adopting the most efficient means to realize their ends, and those orientations that are governed by norms and generally glossed as nonrational. The task of sociology, as Parsons defined it in *Structure*, was to study the nonrational, normative dimension of action systems, while economics retained the task of studying the rational dimension of action systems. Even when Parsons later transfigured his basic frame of reference into the four-function paradigm, his point of departure remained that of meaning or purpose, since mechanisms like adaptation and integration were defined in terms of the purposes they fulfilled in maintaining a system of action.

Although each of these formulations harbors a clutch of conflated ideas—confusions that have frustrated generations of readers—in their relatively crude state, they can be used to stake out certain core issues that emerge when the presuppositions of Simmel and Parsons are led to confront one another. In comparing them we see something of what Parsons presumably had in mind when he suggested that Simmel's schema "cut across" his own. For Simmel's schema indicates that both rational and nonrational action orientations belong to the "contents" of interaction, so that a Parsonian sociology focused on nonrational dimensions of action fails to provide a way to study relational structures, while Parsons argued that, by failing to examine the motivational dimension of social interaction in a systematic way, a Simmelian sociology focused on forms fails to provide explanatory accounts of social action. According to Simmel's frame of reference, Parsons neglects forms for contents; in the perspective of Parsons, Simmel neglects contents for forms. As Parsons himself put it, "My objection to . . . Simmel [concerned] his programmatic formula that the fruitful way to proceed was to construct 'formal sociology,' that is the idea that *the forms of social relationship should be the center of attention rather than the substantive content of social action*" (1979, p. 2; emphasis mine).¹⁴

¹⁴ In his work on *Structure*, including the unpublished section on Simmel, Parsons dealt with Simmel's crosscutting emphasis on forms by relegating it to the status of a merely *descriptive* approach. In a significant passage toward the end of *Structure*, he wrote, "This isolation of descriptive aspects can take place in two main directions, [one of which] may be called the relational. . . . In so far as this *interaction* of the action systems of individuals is continuous and regular these relationships acquire certain identifiable, relatively constant properties or descriptive aspects. One of them is the structural [defined in a footnote as "Simmel's 'form' "]. Another is involved in the relative priority of *Gemeinschaft* and *Gesellschaft*. No attempt will be made here to give it a specific name as a property" (1968, p. 744; emphasis in original). I would argue that in *The Social System* (1951) Parsons came to *transform the theoretical status of relational constructs from descriptive aspects into analytic elements*,

CLARIFICATIONS

This gross contrast remains even after one sorts out the confusions that encumber the accounts of their presuppositions by both authors. In Simmel's work the confusions stem from the radically diverse orders of phenomena that he subsumes under the category of social forms. In the collection of sociological essays Simmel assembled in the great *Soziologie*, he included such disparate topics as superordination and subordination (chap. 3), conflict and competition (chap. 4), the stranger and the poor person (chaps. 9, 4), secret societies (chap. 5), group expansion and the development of individuality (chap. 10), and the quantitative aspects of groups (chap. 2). In the language of present-day sociology we would describe these under quite distinct categories. Super- and subordination designates a kind of social *relation*; conflict and competition, kinds of *process*; the stranger and the poor, *social roles*; secret societies, a kind of *collectivity*; group expansion, a *developmental pattern*; and group size, a dimension of social organization, hence a *structural variable*. To articulate these distinctions is simply to provide a more systematic account of what a Simmelian sociology of forms encompasses. To analyze the forms of association now means to *look at the structural aspects of phenomena from a variety of angles*. The study of social forms, following Simmel, can focus on relationships, or interaction processes, or roles, or collectivities, or developmental patterns, or structural variables. Each of these categories offers a way to represent structural regularities abstracted from diverse purposive areas of human life.¹⁵ Thus, each of the phenomena mentioned above can be refracted into all of these structural categories (see table 1).

Having disentangled the several kinds of phenomena Simmel included in his analyses of social forms, we find his basic principle still at work but realized in a more transparent and differentiated manner. Any one

analogous to the way he later transformed the status of political science from a descriptive discipline into an analytic discipline. However, the route he chose was to differentiate Tonnies's contrasting types into patterns of value-orientation rather than to construe Simmel's interactional types as patterns of analytic formal elements—as von Wiese had, in effect, done.

¹⁵ "A relationship, like superordination-subordination, is a form considered with respect to the kind of connection linking a number of statuses. A process, like conflict, concerns the kind of activity that goes on among the incumbents of those statuses. A status-role, like the stranger, concerns the properties of one party to a relationship. A collectivity, like a secret society, concerns the properties of one party to a relationship when that party consists of a plurality of units. A developmental or dynamic pattern, like group expansion and the development of individuality, is some regularity concerning formal changes exhibited by groups over time. A structural variable, like size, is some dimension of organization, changes in which are accompanied by changes in other aspects of organization" (Levine 1981, p. 68).

TABLE 1
A NEO-SIMMELIAN SCHEMA OF SOCIAL FORMS

Relation	Process	Role	Collectivity	Dynamic Pattern	Variable
Super/subordination	Domination	Superior	Ruling elite	Imposition of rule	Degree of inequality
Enmity	Conflict	Enemy	Army	Escalation	Degree of antagonism
Host-stranger relation	Sojourning	Stranger	Stranger collectivity	Estrangement	Degree of assimilation
Secrecy	Concealment	Secret holder	Secret society	Declassification	Degree of publicity
Disimilarity	Social differentiation	Individualized member	Heterogeneous group	Group expansion and individualization	Group size

of the formal categories listed above, for example, could be applied in such diverse substantive areas as art, business, education, health care, politics, or religion.

Several confusions pervade Parsons's discussion of his presuppositions. The most serious one, perhaps, appears in Parsons's tendency to equate the rational dimension of action with the pursuit of material interests. This confusion has been amplified by Alexander, otherwise one of Parsons's most perspicacious readers, who has elevated this equivalence into an apical theorem of Parsonian theory. In one of Alexander's recent formulations, he writes: "Every theory of society . . . assumes an answer to the question, 'What is action?' Every theory contains an implicit understanding of motivation. Is it efficient and rational, concerned primarily with objective calculation? Or is it nonrational and subjective, oriented toward moral concerns or altruism, strongly affected, perhaps, by internal emotional concerns?" (1988a, p. 13).

This lumping together of subjectivity, emotionality, and morality derives from the fact that Parsons took the economistic model of human action as his point of departure in articulating a theory of action. Yet, in making these notions equivalent, Parsons ignored a long line of Western thought, evident especially in Hellenic philosophy, Kantian idealism, and French social theory, which proceeds from the assumption of a body-mind dualism and holds that reason stands in opposition to desire and that rationality forms the ground of human moral orientations. This construction of rationality was still retained in Weber's notion of value rationality; it figured prominently in the arguments of Dewey and Mead regarding the role of rationality in the domain of public discourse and has been recovered by Habermas in his notion of discursively argued validity claims. If these distinctions are to be incorporated into a synthetic action theory, then the notions of utility and rationality must be cross-classified rather than equated (see table 2).

While this schema offers a clarified and differentiated account of the orientations of action, it does not affect the question of the relationship between orientations and structure (Simmel's contents and form) in Parsons's thought. When Parsons discusses structure, he defines it as referring to relatively *constant* features of a system of action, contrasting it with the system's dynamic or processual aspects. But how does he represent structure? In his first phase, structure referred simply to the organization of action orientations. In the middle phase, when he distinguished social systems from other systems of action, he defined it in terms of institutionalized norms: thus, the pattern variables, alternatives of value-orientation, were presented as the main way to represent different kinds of social structure. In the later phase, he emphasized the subordination of structural analysis to functional considerations. Rejecting the appella-

TABLE 2
A NEO-PARSONIAN ACTION SCHEMA

ENDS OF ACTION	MODES OF ACTION	
	Nonrational	Rational
Material interests	Appetitive dispositions	Instrumental rationality
Ideal interests	Moral sentiments	Value rationality, discursive morality

tion of "structural-functional theory" on grounds that "the concept function is not correlative with structure, but is the master concept of the framework for the relations between any living system and its environment" (1977, p. 236), he came to subordinate structural analyses to matters involving the interchange of inputs and outputs among functionally differentiated units. Thus, throughout his work, Parsons found ways to subsume structural considerations under the rubric of meanings—the actor's rational/nonrational orientations, the value-orientations embodied in institutionalized norms, or the purposes embodied in functionally defined subsystems. At no point did he provide a way to represent interactional structures independent of the motivations or purposes of action, although he did provide increasingly rich and differentiated schemata for analyzing the orientations of action.

Simmel, by contrast, provided analyses that could be formalized into the terms of a schema of pattern variables for the analysis of interaction structures. In attempting to articulate such a schema, I once identified at least six such variables (1981). These include group size, social distance, vertical position, valence (positive/negative sentiments), self-involvement, and symmetry. That is, any social form can be characterized structurally by specifying how many actors it involves, how close (in various respects) they stand to one another, the degree and type of vertical gradation they exhibit, the respects in which they are positively and/or negatively disposed to one another, the extent of the claims they make on the personalities of their members, and the extent to which the expectations among their members are reciprocal or asymmetrical. On the other hand, for purposes of sociological analysis, Simmel relegates concern for the motivational bases of those structures to what Parsons would have called a residual category.

It does seem that we here confront an irreducible difference between the two approaches. If one's point of departure is to focus on formal structure, purpose becomes residual; if one focuses on purpose, whether in the idiom of actor's values or systemic needs, structure becomes residual. Sociologists tend to divide along the lines of one or the other ap-

proach. The division seems accentuated by the fact that some sociologists have tried to embrace both but only at different points in their careers. Thus, R. F. Bales developed an ingenious schema for analyzing interaction process in terms of functional categories, which he abandoned in favor of a schema that instead measures group structure in terms of Simmelian structural categories such as position (dominance/submissiveness) and valence (friendliness/antagonism), he retained only a single category that designates a functional role (expressiveness/instrumentality). James S. Coleman, on the other hand, initially worked with Simmel-like structural categories in his analysis of community conflict but turned in his later work to a focus on rational action orientations. Is there anything more to be said of the matter other than that we have apparently reached an impasse in trying to integrate two contradictory perspectives?

EPISTEMIC PERSPECTIVES

At this juncture I propose to shift the level of discourse and raise a metatheoretical question regarding the status of incompatible theoretical positions and to advance the notion propounded by those who advocate what has been termed a position of methodological pluralism: the notion that two or more mutually contradictory positions may both be valid. In so doing I want to argue that Simmel and Parsons both have inconsistent positions on the matter. In certain respects, each is a monist; in other respects, each is a pluralist.

When setting forth the principles that ground his approach to sociological investigation, Simmel claimed to be replacing vague and uncertain conceptions of sociology with an unambiguous subject matter, one governed by a methodologically secure research program. He presents his view of the discipline and its agenda as the only defensible conception. On the other hand, as I argued at length in a recent article (Levine 1989), when discussing the nature of both history and philosophy, Simmel showed himself to be an uncompromising and precocious advocate of a pluralist epistemology—in arguments that logically must be extended to cover the domain of sociology as well.

Parsons manifests a comparable inconsistency. Although early on in *Structure* he endorsed Znaniecki's argument that facts about human social phenomena may be represented in a number of different, often cross-cutting schemata, he went on to develop the "action" frame of reference as the only plausible and all-encompassing theoretical framework for the analysis of human phenomena. Within that framework, he defined a uniquely plausible place for the discipline of sociology. While the terms of that definition changed at various points in his career, in every instance he maintained that the role he was assigning to sociology described its

mission univocally. Although, in contrast to Simmel, Parsons remained a more consistent monist throughout his career, his later discussions of the constitutive role of cultural symbolism and the independent variability of symbols in shaping all actional dispositions could be drawn on to ground a pluralist position quite at variance with his own predilections.

Those parts of their arguments that Parsons and Simmel advance to ground a position of epistemic pluralism seem to offer the most promising way to resolve the problem generated by their contradictory presuppositions regarding both methods and principles. We may draw on those arguments to construct a view of the sociological tradition that reduces it neither to a trajectory of continually improved empirical techniques nor to a single channel of theoretical formation. They help us to understand that the heritage of sociology is radically pluralistic, in that its range of visions or insights neither can nor should be reduced to a single mold or research program. To say this, however, is not to maintain that the divergent orientations in sociology have been or should be maintained in antiseptic isolation from one another. On the contrary, the diverse traditions within sociology have taken their shape partly in reaction to one another through progressively developing but contrasting solutions to common problems, and such dialectical interplay makes up a good part of what may be called genuine intellectual progress in the discipline (Levine 1985*b*). In the rest of this article, I wish to suggest ways in which the divergent epistemic approaches of Simmel and Parsons, while arguably incommensurable, may nevertheless be enriched and refined through systematic confrontation with each other.

CONNECTIONS

Simmel's approach to the study of society is vulnerable in three respects that a Parsonian critique readily reveals. It can remain a distinctive and even more fruitful approach, I submit, by responding to the following criticisms.

For one thing, in viewing the dispositions to engage in social interaction as presocial, Simmel is vulnerable to the objection, voiced long ago by Durkheim, that the "contents" of association are themselves social facts. In Parsonian terms, dispositions to associate in certain ways reflect processes of socialization and social control that continually shape the motivations of actors—Simmel's "impulses and purposes."

What is more, the forms those associations take receive much of their character and color from cultural patterning. For example, although many properties of conflictual forms derive from factors internal to the conflictual process as such, different cultures produce diverse modes and styles for engaging in conflictual interaction. In some cultures, conflict

gets expressed with a great show of aggressive bravado, in others with much emphasis on serious demeanor and respect for one's opponent, and in others with a great show of ribaldry and wit.

To say this is to suggest that *part* of what enters into the constitution of social structure is the operation of norms—a fact of which Simmel was fully cognizant. In “Zur Methodik der Sozialwissenschaft” (1896), for example, he considered Rudolph Stammler's argument that “society is present where the behavior of men is determined not only by laws of nature but also by human normation.” Although he maintained that Stammler's position thereby unjustifiably elevated a mere secondary phenomenon into the essential defining property of society, he still acknowledged that norms provide indispensable conditions of human association.¹⁶ Throughout his substantive analysis, moreover, Simmel shows his awareness of the operation of normative factors—as, for example, in his famous discussion of the way in which conflict unites antagonists by subordinating them to common rules and regulations or in his discussion of the internalization of moral standards in conscience.

The distribution of different interactional forms, finally, varies from place to place as a function of cultural programming. In some cultures, forms such as hospitality or friendship may be highly valued and omnipresent, whereas they may make only cameo appearances in others. The form of litigation is enormously prized in many societies in East Africa, while in the cultures of East Asia it is avoided as much as possible. Here, too, we should note that Simmel clearly indicated his awareness of the salience of cultural factors in determining the configuration of interactional forms found in a particular setting. As early as his 1894–95 paper on the problem of sociology, he specified that the study of the forms of association should include analysis of the modifications they undergo due both “to the various stages of production and the variety of dominant

¹⁶ Simmel (1896) wrote that “everywhere that human conduct is determined not only by natural laws but also by human normation—that may be termed ‘society.’ To say this, however, seems to me to elevate a mere subsidiary phenomenon, a secondary *conditio sine qua non*, into the positive vital principle of society. A religious group . . . takes form as an association not by virtue of ‘regulation through externally constraining norms,’ but through the fact that every member knows himself to be one with the other in belief . . . This psychological interaction in the ‘invisible church’ is what constitutes society. . . . The members of a credit union submit themselves to a certain regulation of contributions and withdrawals, to be sure . . . However, that is only a limiting condition; the positive principle of their association is the reciprocally extended assistance. . . . A sociable gathering, a ‘party,’ doubtless presupposes a large number of external regulations of the conduct of its participants. Even so, even if all of these regulations are fully observed, the sociable gathering becomes a party in the true sense of the term, according to its vital principle—in Aristotelian language, according to its entelechy—only when it becomes a scene of mutual pleasing, stimulating, and cheering” (Simmel 1896, pp. 579–80; my translation).

ideas of the time." In Parsonian terms, then, one could say that Simmel acknowledged the salience of norms and cultural ideas but relegated them to the status of a residual category.

On the other hand, Parsons's approach to the study of society is vulnerable in certain respects that a Simmelian critique readily reveals. If Simmel ignores or makes residual the shaping of interactional structures by values and norms, Parsons fails to identify any features of interactional structure other than those contributed by values and norms. From his earliest essays on role structure onward, Parsons consistently defined the social system as consisting of "institutionalized norms." This omission of extranormative dimensions of structure can perhaps be corrected by incorporating Simmelian modes of structural analysis while yet maintaining the primacy of value-orientations or systemic functions as points of departure for sociological inquiry.

Thus, one could still take different value-orientations as foundational for major patterns of social stratification yet incorporate analyses of structural variables like group size, number of status positions, ecological distribution of positions, and the like. One could look at norms governing different role sets and still enrich the analysis by considering degrees of intimacy, antipathy, and symmetry involved in the relations among those role incumbents. One could identify general values and beliefs associated with the perception of strangers, renegades, middlemen, and debtors and still specify the relational features of those roles in terms that vary independently of those norms. One could accept Parsons's late stipulation that the most important structural components of any action system are the symbolic codes used in communication and decision making (1977, p. 237) and incorporate analyses of different kinds of network patterns and other interactional structures that channel that communication.

This kind of reciprocal refinement through dialectical interplay could be extended to the differences of method and other issues on which Simmel and Parsons diverge. The analysis of forms could be recast in terms of a general logistical system that analyzes them in terms of the elements specified in a general theory of action, just as general action theory could be recast in ways that focus on the constitution of type phenomena. Parsons's emphasis on the interpenetration of personality systems, social systems, and cultural systems could be enriched by supplementing it with the Simmelian emphasis on the independence and mutual antagonism of the principles animating each of these modes of organizing the contents of human action—the incommensurable, irreducible "worlds" of self, society, and objective culture—and vice versa (see Levine 1985a, chap. 9).

Even when it may prove impossible to combine the divergent approaches of the two authors in a single interpretive framework where

one is dominant and the other subordinate, the social analyst may benefit from alternating the two perspectives when considering some particular set of phenomena. Thus, to consider one other axis of difference between Parsons and Simmel, one may look at the professional role or the pattern of an ideology, first, by considering which value-orientation or functional need has primacy in the pattern and, then, by looking at it by considering the opposed, dualistic, or ambivalent strains it conjoins.¹⁷

The general intellectual strategy I invoke here resembles what Walter Watson (1985) has described as "reciprocal priority." This entails acknowledging that the choice of a starting point for analysis, since it cannot be determined by the facts, represents some arbitrary element that is nonetheless indispensable for interpretive work. The different approaches are incompatible in the sense that one must use one of them at a time and not mix them up indiscriminately. But one can use a given principle, like forms of interaction or systems of action, in ways that take into account many of the facts and constructions highlighted by the other principles, or one can alternate, using the different starting points at different times.

Insofar as both Simmel and Parsons provide arguments to support the position of epistemic pluralism, they can be drawn on to support the type of integration of their respective approaches advocated here. It now remains for us to find the discipline and capaciousness to reach this new kind of ecumenicism and thus move beyond the most recent period of warring schools into discourse cast in a more constructive idiom.

REFERENCES

- Alexander, Jeffrey C. 1983. *Theoretical Logic in Society*, vol. 4: *The Modern Reconstruction of Classical Thought: Talcott Parsons*. Berkeley and Los Angeles: University of California Press.
- . 1987. *Twenty Lectures: Sociological Theory since World War II*. New York: Columbia University Press.
- . 1988a. *Action and Its Environments. Toward a New Synthesis*. New York: Columbia University Press.
- . 1988b. "Parsons' Structure in American Sociology." *Sociological Theory* 6:96–102.
- . 1989. "Against Historicism/for Theory. A Reply to Levine." *Sociological Theory* 7:118–21.
- Aron, Raymond. 1968. *Main Currents in Sociological Thought*, vol. 1. Translated by R. Howard and H. Weaver. Garden City, N.Y.: Doubleday.
- Camic, Charles. 1979. "The Utilitarians Revisited." *American Journal of Sociology* 85:516–50.
- . 1989. "Structure after 50 Years. The Anatomy of a Charter." *American Journal of Sociology* 95:38–107.

¹⁷ On this general methodological issue, see Merton (1976, chap. 1).

- . 1991. Introduction to *The Early Essays of Talcott Parsons*, edited by Charles Camic. Chicago: University of Chicago Press.
- Gould, Mark. 1987. *Revolution in the Development of Capitalism: The Coming of the English Revolution*. Berkeley and Los Angeles: University of California Press.
- Habermas, Jürgen. 1987. *The Theory of Communicative Action*, vol. 2. Boston: Beacon.
- Jaworski, Gary Dean. 1990. "Simmel's Contribution to Parsons' Action Theory and Its Fate." Pp. 109–30 in *Georg Simmel and Contemporary Sociology*, edited by Michael Kaern, Bernard S. Phillips, and Robert S. Cohen. Dordrecht: Kluwer.
- Kracauer, Siegfried. 1920–21. "Georg Simmel." *Logos* 9:307–38.
- Levine, Donald N. (1957) 1980. *Simmel and Parsons: Two Approaches to the Study of Society*. New York: Arno.
- . 1981. "Sociology's Quest for the Classics. The Case of Simmel." Pp. 60–80 in *The Future of the Sociological Classics*, edited by Buford Rhea. London: Allen & Unwin.
- . 1984. "Ambivalente Begegnungen: 'Negationen' Simmels durch Durkheim, Weber, Lukacs, Park, und Parsons." Pp. 318–37 in *Georg Simmel und die Moderne*, edited by H. J. Dahme and O. Rammstedt. Frankfurt: Suhrkamp.
- . 1985a. *The Flight from Ambiguity: Essays in Social and Cultural Theory*. Chicago: University of Chicago Press.
- . 1985b. "On the Heritage of Sociology." Pp. 13–19 in *The Challenge of Social Control: Citizenship and Institution Building in Modern Society*, edited by Gerald Suttles and Mayer Zald. Norwood, N.J.: Ablex.
- . 1986. "The Forms and Functions of Social Knowledge." Pp. 271–83 in *Metatheory in Social Science: Pluralism and Subjectivities*, edited by D. W. Fluke and R. A. Shweder. Chicago: University of Chicago Press.
- . 1989. "Simmel as a Resource for Sociological Metatheory." *Sociological Theory* 7:161–74.
- Levine, Donald N., E. B. Carter, and E. M. Gorman. 1976. "Simmel's Influence on American Sociology," pts. 1, 2. *American Journal of Sociology* 81:813–45, 1112–32.
- McKeon, Richard. 1951. "Philosophy and Method." *Journal of Philosophy* 48: 653–82.
- . (1952) 1990. "Freedom and History: The Semantics of Philosophical Controversies and Ideological Conflicts." Pp. 160–241 in *Freedom and History and Other Essays*, edited by M. K. McKeon. Chicago: University of Chicago Press.
- Merton, Robert K. 1976. *Sociological Ambivalence and Other Essays*. New York: Free Press.
- Park, Robert E., and Ernest W. Burgess. 1921. *Introduction to the Science of Sociology*. Chicago: University of Chicago Press.
- Parsons, Talcott. 1932. "Economics and Sociology: Marshall in Relation to the Thought of His Time." *Quarterly Journal of Economics* 46:316–47.
- . 1935. "The Place of Ultimate Values in Sociological Theory." *International Journal of Ethics* 45:282–316.
- . 1936. "Georg Simmel and Ferdinand Toennies: Social Relationships and the Elements of Action." Harvard University Archives, Parsons Papers, Unpublished Manuscripts 1929–67, Box 2.
- . (1937) 1968. *The Structure of Social Action*. New York: Free Press.
- . 1951. *The Social System*. Glencoe, Ill.: Free Press.
- . 1977. *Social Systems and the Evolution of Action Theory*. New York: Free Press.
- . 1979. Letter to Jeffrey Alexander, January 19. Harvard University Archives, Parsons Papers, Correspondence 1965–79, Box 1.
- Parsons, Talcott, E. A. Shils, K. D. Naegle, and J. R. Pitts. 1961. *Theories of Society*. New York: Free Press.

- Simmel, Georg. 1896. "Zur Methodik der Socialwissenschaft." *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reich* 20 575-85
- . (1908) 1968. *Soziologie*. Berlin: Duncker & Humblot.
- . 1955. *Conflict and The Web of Group-Affiliations*. Glencoe, Ill : Free Press
- Smelser, Neil J. 1988. "Sociological Theory Looking Forward." *Perspectives: The ASA Theory Section Newsletter* 2 (2): 1-3.
- Sorokin, Pitirim. 1928 *Contemporary Sociological Theories*. New York: Harper.
- Steinboff, Maria. 1925. "Die Form als soziologische Grundkategorie bei Georg Simmel." *Kölner Vierteljahrshefte für Soziologie* 4 215-59
- Watson, Walter. 1985. *The Architectonics of Meaning: Foundations of the New Pluralism*. Albany: State University of New York Press.

Why Do Strikes Turn Violent?¹

Don Sherman Grant II
Ohio State University

Michael Wallace
Indiana University

Past research on violence in collective movements using the resource-mobilization perspective has focused almost exclusively on the instrumental role violence plays for "outsider" groups seeking political recognition. Little is known about the causes of violence among groups such as labor unions that are at least marginally incorporated into the polity. There have been no empirical studies of the determinants of strike violence in advanced countries during the post-World War II period when workers' interests have become "institutionalized." This article uses strike-level data from Ontario from 1958 to 1967 to examine the causes of strike violence. Strike violence is related to features of the sociopolitical context within which strikes occur, the legislative environment, the skill mix of striking workers, and of great importance, the strategies utilized by striking workers and the counterstrategies used by employers. In sum, violence is shown to be employed as a defensive measure after challenger groups have gained access to the polity.

Research by proponents of resource-mobilization (RM) theory on the determinants and consequences of violence has traditionally emphasized the instrumental role of violence when employed by groups outside the polity. In demonstrating the usefulness of violent tactics to such groups, these works typically study a group's history only up to its formal acceptance in the polity (see, e.g., Gamson 1975; Piven and Cloward 1977). Consequently, little is known about the conditions under which such groups use violent tactics after being accepted.

While acceptance and legitimacy certainly constrain opportunities for a group to employ violence, they do not preclude violence altogether. Rather, groups that achieve member status are likely to continue to em-

¹ We are grateful to Robert Kaufman for technical assistance and to Craig Jenkins and three anonymous reviewers for helpful comments on previous drafts of this paper. Requests for reprints should be sent to Michael Wallace, Department of Sociology, Indiana University, Bloomington, Indiana 47405.

ploy violence in certain contexts, primarily defensively. After acceptance into the polity, groups can no longer employ violence in a routinely offensive manner since this could jeopardize existing power arrangements and alienate critical third parties and bystander publics. Instead, violence, especially among marginally incorporated groups, must be used judiciously and limited to situations in which the group's past achievements and position in the polity are at stake.

In this article, we examine the determinants of strike violence, using unique strike-level data (data for which the units of analysis are strikes) from Ontario between 1958 and 1967. Ontario is Canada's most industrially diversified and, therefore, most representative province. Over the 10-year period of the study, Ontario displays a variation in industrial structure, employment context, and economic conditions that approximates the conditions in many advanced industrial capitalist nations. Yet, Canada has a unique sociopolitical context, particularly its state mechanisms for regulating strike activity, that makes it interesting to study in its own right. Before discussing the context of strike violence, however, we turn to a brief discussion of what we regard as limitations for understanding violence within the RM framework.

LIMITATIONS OF RM THEORY FOR EXPLAINING VIOLENCE

Despite the contributions of RM theory to the understanding of social movements and collective action (Jenkins 1983), our understanding of violence has been poorly informed, perhaps even misinformed, by the theory's central tenets. In the discussion below, we highlight what appear to be the key obstacles to using the RM approach for a more rigorous specification of the sources of violence.

1. *Marginal groups.*—The sharp dichotomy between polity members (i.e., "insiders") and challengers (i.e., "outsiders") provides little insight into why violence occurs with groups that are marginally incorporated into the polity. This overly restrictive conception of contending groups has tended to limit the range of groups studied in research on violence (e.g., Gamson 1975). The conditions under which downtrodden, oppressed, or disenfranchised groups utilize violence to pursue their goals (and why violence succeeds or fails) are well documented (Piven and Cloward 1977). But such studies have not equipped us to understand the occasionally violent tactics of groups we define here as "weak insiders," that is, groups that are formally polity members but whose position is marginalized by their power vis-à-vis other actors. We argue that weak insiders face ambiguous circumstances at best. As legitimate actors in the system, they are reluctant to use violence as a first resort for fear of alienating allies and sympathizers. Bureaucratic organization of social-

movement organizations and co-optation by political elites further diminish the prospects for violence by weak insiders. However, if their position within the system weakens to the point of jeopardizing past gains, there may be violence.

Recognized labor unions in advanced industrial societies are the quintessential example of weak-insider groups. Since World War II, the right to form trade unions and bargain collectively has become widely accepted, and unions have become institutionalized into industrial societies. But unions' status as legitimate actors is qualified. The public widely recognizes unions as necessary for safeguarding the workers' economic standing and working conditions, yet no institution is more vilified in public-opinion polls than labor unions (Lipset and Schneider 1983). Expiration of union contracts, frequently accompanied by strikes, provides periodic opportunities to renegotiate workers' status. Despite the fact that rank-and-file dissent can often be managed by political elites in collusion with union leadership, such events may provide the terrain on which conflict can erupt into violence, particularly if the union's very existence is jeopardized. Thus, we conclude that weak-insider groups such as labor unions do not necessarily discard violent tactics once they gain legitimate standing in the polity. Rather, they may employ violence selectively, particularly if their position in the system is threatened.

2. Overrationalization and assumptions.—The RM theory “overrationalizes” the use of violence and assumes too explicit a connection between tactics and results. One consequence of overrationalization is the attribution to challengers of an unrealistic prescience of outcomes. Violence is viewed “instrumentally” as one of many rational strategies at the disposal of contenders (Gamson 1975). In fact, violent acts by challengers are employed with great trepidation because they realize that violence typically raises the stakes for all actors, justifies harsher intervention by elites, (potentially) creates disunity within their own ranks, and injects new dynamics with unforeseeable consequences into the situation. This suggests that studies of violence should be grounded in the differing capacities of the actors involved, the features of the social context that facilitate or reward violence, and the situational components of conflict events that make violence likely or unlikely.

We propose a “situational perspective” that depicts violence as an emergent phenomenon, grounded in the social context and interplay of events between conflicting groups. One of our important arguments is that tactics change as events unfold: tactics that seem unthinkable in the early days of a conflict may seem the only logical course of action in later days. As certain tactical resources are exhausted or as the efficacy of more peaceful strategies is blocked by elites, violence emerges as a more viable and justifiable strategy. In short, violence can emerge for unfore-

seen reasons and with outcomes that could not have been foreseen by the actors when the conflict began.

3. *Violent tactics.*—Violent tactics are viewed by RM theorists exclusively as purposeful strategies by challengers for inciting social change with little recognition of how countermobilization strategies of elites also create violence. The role of elite counterstrategies has been virtually ignored in research on collective violence. Of course, history is replete with examples of elites' inflicting violence on challenging groups with the full sanction of the state. Typically, elite-sponsored violence occurs when the power resources and legal apparatus are so one-sidedly in the elites' favor that the outcome is never in doubt. In conflicts with weak insiders, elites may not act so openly unless weak insiders flaunt the law. Typically, elite strategies do not overtly promote violence but rather provoke violence by the other side in hopes of eliciting public condemnation or more vigorous state repression of challenger initiatives. This is a critical dynamic in struggles involving weak insiders such as unions. In these cases, worker violence, even when it appears justified, erodes public support for the workers' cause and damages the union's insider status.

4. *Homogeneity and similarity* —Many RM theorists incorrectly assume that members of aggrieved groups are homogeneous in their interests and share similar positions in the social structure. This (assumed) homogeneity of interests is rare for members of outsider groups and even more suspect for members of weak-insider groups. Indeed, groups are rarely uniform and often include relatively advantaged persons who have other, more peaceful channels in which to pursue their goals. Internal stratification processes mean that different persons have varying investments in current structural arrangements, in addition to their collective interest in affecting social change. Again, these forces are especially prevalent for weak insiders even the group's lowest-status members are likely to have a marginal stake in the system; high-status members are likely to have a larger stake and, therefore, less commitment to dramatic change in the status quo.

Internal differences may lead to fragmentation of interests and lack of consensus about tactics, especially tactics suggesting violent confrontation. While group members share common grievances, individual members may be *differentially aggrieved* by the current state of affairs or *differentially exposed* to elite repression. White's (1989) research on the violent tactics of the Irish Republican Army shows that working-class members and student activists, when compared with middle-class participants, are more vulnerable to state-sponsored repression, more likely to be available for protest activities, and reap more benefits from political violence. When we apply them to our study of strike violence, we find that differences in skill levels are known to coincide with major intraclass

divisions in material interests (Form 1985) and are likely to coincide with the tendency for violent action. For instance, skilled-craft workers, who are more socially and politically conservative than unskilled workers, are less likely to view relations with employers as inherently antagonistic and are prone to separate themselves from unskilled workers, factors that should decrease their participation in violence.

5. *Linear relationship.*—The RM theorists' assumption of a linear relationship between resources and collective action may not necessarily apply to the relationship between resources and violence. Our expectations about the likelihood for violence incorporate insights from Korpi's (1974) power-balance model. Korpi argues that relative power resources between conflict groups, tempered by the actors' perceptions of the prospects for success, are key ingredients in the degree of conflict between the actors. He posits a curvilinear relationship between power resources and the propensity for "manifest conflict" such that the prospects for conflict are lowest when power differences are either very large or very small and highest when power differences are in an intermediate range. We utilize a modified version of Korpi's model to predict the likelihood for violence: we anticipate that violence is most likely when there is a one-sided distribution of power and least likely when the power resources of two groups are roughly equivalent. Elites will employ violence when they sense that challengers do not have the numbers or the resources to carry the day. Challengers will utilize violence if they feel that the existing arrangement is unjust and that they can overpower elites in a quick show of force.

This logic can be applied in reverse to explain the likely consequences of any internal divisions within the challenging group itself. If there is an internal dispute about conflict strategy, for instance, violence is more likely if the division results in two roughly equal camps than if there is a large majority in one direction or the other. Deep divisions within the challenging group signal disunity of tactics and purpose, which elites may utilize to foment internal chaos. Elite-sponsored support for one faction or the other may incite violence between factions or by one faction against elites. In addition, elites may take advantage of the disunity within the challenging group to inflict violence while the opposition is weak, a special case of the argument raised above. In either case, these arguments suggest that the relationship between the relative power resources of contending groups and violence may be curvilinear, not linear.

PAST RESEARCH ON VIOLENT STRIKES

The starting point for our analysis of industrial violence in Ontario is three studies on industrial violence in other countries—Shorter and

Tilly's (1971) study of France from 1890 to 1935, Snyder and Kelly's (1976) study of Italy from 1878 to 1903, and Taft and Ross's (1969) study of the United States in the 20th century. It is important that all of these studies covered periods when labor unions were virtually excluded from legal participation in the polity, and in no study did labor unions have the weak-insider status of trade unions in Ontario in the mid-20th century. Nevertheless, several important insights and hypotheses can be gleaned from these studies and applied to our study of Ontario.

Shorter and Tilly's study (1971) covers a period in French history (1890–1935) when strike violence was low and on the decline, compared with that in other industrial societies. Indeed only 2% of the strikes in their sample (i.e., 88 out of over 4,000) were violent. Their sample is based on French newspaper accounts of strikes and, as they admit, tends to underrepresent small stoppages in which authorities did not intervene. Shorter and Tilly differentiated between violent and peaceful strikes by using a dichotomous measure gleaned from newspaper reports. Conducting separate analysis on the two types of strikes, they found that violent strikes were both larger and longer lasting than peaceful strikes. They expected, but did not find, that strikes over union-organization issues were more violent. They also found that industries with tightly knit work organizations and modern conflict strategies were more likely to strike but less prone to violence. These findings provide a baseline for later studies of strike violence, but several limitations preclude a rigorous comparison. First, Shorter and Tilly's sample was skewed toward larger strikes and their data were biased by the limitations of newspaper accounts. Also, because the period they study was before the full institutionalization of labor into the French polity, it is difficult to extend the results straightforwardly to a period in which trade unions were legally sanctioned.

Snyder and Kelly's (1976) study of over 6,000 Italian strikes between 1878 and 1903 overcomes many of the methodological limitations of Shorter and Tilly's research, but it also involves a period before, and shortly after, the official recognition of trade unions in Italy. Relative to Shorter and Tilly's French case, Italy was characterized by markedly more labor conflict. Between 1878 and 1903, the number of strikes in Italy rose steadily despite government prohibitions throughout most of the period. This period was particularly violent, as indicated by the fact that 11% of strikes in the Italian sample were violent. Snyder and Kelly found violence was more likely in large, lengthy strikes. They investigated several aspects of strike issues: whether strikes were (a) offensive or defensive, (b) related to wages or to union organization, and (c) single issue or multiple issue. Of these, they found that only multiple-issue strikes significantly increased strike violence. Snyder and Kelly found the

effects of such contextual variables as wage changes and industrial growth to be trivial. Like Shorter and Tilly (1971), they found interindustry differences suggesting that industries in which workers lacked a tightly knit organizational structure were more likely settings for violent strikes. This suggests that violence may be inversely associated with organizational strength of workers and that workers with adequate organizational resources and disciplined strategies may be less prone to violence. Snyder and Kelly also produced slight evidence that strike violence was negatively associated with the repressiveness of the political regime (see also Snyder and Tilly 1972). Further, the post-1890 legalization of trade unions did not directly affect the violence of conflicts but did apparently affect the association of violence with other political and economic indicators. Basically, Snyder and Kelly found that contextual factors indexing political and economic conditions had weak effects compared with strike-level variables. They also found that violent strikes were less likely to yield a favorable outcome, a result that directly challenges Gamson's (1975) findings for protest movements as a whole. Our data for Ontario do not permit an analysis of violence on the outcomes of strikes, so we limit our focus to the first of Snyder and Kelly's concerns: the determinants of strike violence.

Finally, Taft and Ross's (1969) widely cited study of American industrial violence is one of the few to include a discussion of violent strikes that have occurred since World War II. But their analysis consists of an in-depth discussion of a few highly publicized violent strikes, which thus precludes any systematic comparison of violent and nonviolent strikes. They do, however, concur with the expectations (not the findings) of both previous researchers that strikes over union-organization issues are more likely to be violent than strikes over other issues. However, these other findings from the Taft and Ross study have limited applicability here because of the nature of their sample and analysis.

In short, there is no rigorous, quantitative study of strike violence in advanced industrial countries in the post-World War II era. However, research by Jamieson (1968), Taft and Ross (1969), and others suggests that violence has been an important feature of strikes in this era, particularly in the United States and Canada. Hence, the opportunity to investigate industrial violence during the late 1950s and early 1960s should illuminate the processes that contribute to the outbreak of violence among weak-insider groups.

THE INSTITUTIONAL CONTEXT OF STRIKE VIOLENCE IN CANADA

Canadian strike activity in the postwar period follows the "North American pattern of industrial conflict" (Ross and Hartman 1960, p. 161; see

also Lipset 1963, p. 129) and shares with the United States the distinctive "cubist" profile; that is, it is relatively average in frequency and size but exceptionally long in duration (Shorter and Tilly 1974, p. 325; Huxley 1979). Shorter and Tilly (1974, p. 328) attribute the long duration of Canadian and American strikes to the prevalence of business unionism "where the strike has a fundamental role to play within the bargaining process—the *ultima ratio* which brings the parties to the table—yet has few political functions." Still, there are important divergences between American and Canadian strike patterns. Regional and linguistic differences in strike patterns are more pronounced in Canada than in the United States (Jamieson 1968). There has been debate about how closely Canadian strikes mirror the rhythms of the business cycle (cf. Vanderkamp 1970 and Walsh 1975), but there is consensus that the Canadian pattern since World War II is not as predictable as the American pattern (Snyder 1977). Noting the late passage of labor legislation allowing the formation of trade unions (1948), Snyder argues that the institutionalization of Canadian labor lagged behind that of American labor. Hence, he finds that Canadian strikes since World War II, unlike American strikes, are best explained by a mixture of economic, political, and organizational factors.

Another salient comparison between American and Canadian strike activity is the incidence of violence. While reliable statistical accounts of violence are rare, Jamieson (1968) notes that strikes in the United States and Canada are more prone to violence than those in other industrialized countries, a fact he attributes to the "business unionism" of the North American countries. It is important for our analysis that the surge in Canadian strikes that began in the late 1950s and continued through the 1960s coincided with a sharp rise in strike violence.

A key feature of the Canadian industrial relations system that distinguishes it from those in other industrialized countries is the compulsory conciliation process and mandatory postponement of all strikes for a specified waiting period. This system, initiated in 1907, was firmly established by the Industrial Disputes Investigation Act (IDIA) of 1948 for strikes under federal jurisdiction. Similar acts were soon passed in most provinces for strikes under provincial jurisdiction (Huxley 1979). The system works as follows (Rand 1968, p. 163): When an existing collective bargaining agreement is about to expire, the union must file a "notice to bargain," which causes the convening of a conciliation board to study the differences separating workers and employers. After the notice to bargain is filed and before the conciliation board convenes, negotiations may proceed, but strikes are not permitted. Strikes are also illegal during the conciliation period itself. After the conciliation board has convened and analyzed the case for both sides, a report containing recommenda-

tions for settlement *may* be filed. The recommendations, however, are nonbinding. After the conciliation board's work has been done, there is a mandatory waiting period of seven days (after 1966, 14 days, if no report is filed). During the waiting period, strikes remain illegal. By law, strikes can only commence during the "legal period" that starts after the expiration of the waiting period. The IDIA also specifies that strikes are illegal while an existing contract is in force. Strikes over union recognition and union jurisdictional issues are also illegal, since they are governed by other institutional procedures. In short, Canadian strikes can only legally occur during the legal period when an existing contract has expired and the conciliation procedures have run their course.

The utility of Canada's compulsory conciliation system is debatable (Misick 1978). Huxley (1979) contends that the postwar pattern of Canadian strikes has evidenced a countertrend to institutionalization, lodged primarily in resistance to the compulsory conciliation process. He cites data from Flood (1972) that shows that about one-third of Canadian strikes between 1956 and 1969 were wildcat actions that occurred outside the legally sanctioned period for strikes. Many of the illegal strikes seemed to be intraunion conflicts against both overbureaucratization of union governance and "foreign domination" of union affairs. We expect that these countertendencies might have important implications for strike violence. Strikes occurring outside the legally sanctioned period are likely to be more violent for several reasons. First, Canadian employers have historically taken a highly legalistic approach to labor-management conflicts, which suggests they might use any available instruments of legally sanctioned coercion (such as police) to keep their plants running during strikes. Employers are not legally required to protect the jobs of workers who strike illegally. In fact, the legalistic approach suggests that the hiring of strikebreakers may be more likely during "illegal" strikes. Second, the label of illegality likely creates divisions among strikers that will cause some to cross picket lines, which may provoke violence. Hence, we expect that the compulsory conciliation process is likely to affect the violence of strikes in Ontario.

EXPLAINING VIOLENT STRIKES IN ONTARIO

Most studies of violence using the RM perspective are limited to conflict groups operating outside the system who are clamoring for recognition by legitimate agents. Canadian labor, however, clearly qualifies as a weak insider as we define the term. Since trade unions are largely institutionalized as legitimate actors in the sociopolitical arena, we expect that the incidence of violence is low and negatively associated with the strength of the workers' position. Within this context, if strikers are well

organized and disciplined, effective in curbing production at the struck plant, and able to immobilize or gain support of critical third parties, they have little reason to resort to violence. It is when the workers' cause seems to be losing and their strategies are being effectively thwarted by employer counterstrategies that workers are likely to resort to violent actions. In contrast to arguments for the insurgence of "poor people's movements" (Piven and Cloward 1977) and other outsider groups (Gamson 1975), then, we argue that the tactical utility of violence for weak-insider groups like unions is conditioned by the sociopolitical context and the dynamic interactions with employers and the state.

Our emphasis on a situational approach suggests a contextual analysis that integrates a variety of societal level, industry-level, and strike-level processes to explain strike violence. Therefore, we attempt to identify political/organizational and aggregate economic conditions at the societal and industry levels and class organizational variables at the industry level as contextual processes affecting strike violence. In addition, several strike-level variables indexing state regulation, occupational mix of the striking workers, and strike issues are likely to affect strike violence. Finally, variables are included to tap strike strategies of employers and workers.

Political-Institutional Factors

We first consider the set of processes most removed from the strike itself. Several factors at the political-institutional level are important in shaping the institutional context in which strike activity occurs. In settings where labor plays an important role in national politics, prolabor parties may emerge to protect labor's interests. During years when the prolabor party is in power, unruly tactics by workers may increase because the government will be unlikely to suppress violent actions by their major constituency (Gamson 1975). Snyder and Kelly (1976) find violence is less likely during repressive state regimes. In the Canadian context, strikes are less likely to be more violent during years of prolabor-party control as workers take liberties on the picket lines they might not take during antilabor regimes. In Canada, the Liberal party, while not a genuine prolabor party, is decidedly to the left of the Conservative party on labor issues. The Canadian parliamentary structure stipulates that whoever has a parliamentary majority holds the prime minister's office. So a Liberal electoral majority should invite more strike violence.

Similarly, strike violence is likely to decline in periods when labor's political agenda can be advanced through other channels (such as during election years). Here we depart from Snyder and Tilly (1972), who studied collective violence by contending groups *outside* the political system.

They show that collective violence in France *increased* during election years as a result of heightened contention for power, coalition formation, and widespread political agitation. By contrast, because of labor's weak-insider role, trade unions are likely to refrain from strategies that lead to violence during election years so as not to tarnish labor's image during a politically sensitive period. Thus, we expect strike violence to be higher in years in which the Liberal party holds a parliamentary majority and during nonelection years.

Economic Factors

As suggested above, aggregate economic factors might affect the likelihood of violence. Numerous studies have shown that workers are less likely to strike when unemployment is high because there is a larger alternative labor supply from which employers may recruit replacement workers (Rees 1952; Ashenfelter and Johnson 1969; Smith 1979). Nevertheless, some strikes do occur during periods of high unemployment. The question that arises is, How do depressed labor-market conditions affect the propensity for strike violence? Since depressed labor markets favor employers, strikes are likely to drag on indefinitely, which perhaps leads to desperate actions by strikers. When unemployment is high, employers can find alternative sources of labor. The hiring of outside replacements could lead to confrontations as these replacements try to cross picket lines. For these reasons, workers are likely to resort to violence during periods of high unemployment.

Workers' economic standing also affects their propensity to strike. Several studies (e.g., Ashenfelter and Johnson 1969; Snyder 1975) have shown that workers are more likely to strike when their wages have not kept pace with the cost of living. Once workers strike, their economic standing is also likely to affect the outbreak of violence. In times of economic hardship, the stakes are higher for workers and industrial conflict may be protracted as employers dig in to resist wage demands. We hypothesize that the larger the disparity between workers' real and expected earnings in the recent past, the more likely it is that strikes will turn violent. Both economic indicators discussed here point to a consistent pattern: strikers confronted with severe economic hardship (i.e., high unemployment or declining wages) may turn to violence as a last resort.

Class Organization

Among RM theorists, there is some debate about whether formal organizations like unions hinder or facilitate the use of violent tactics. Gamson (1975) contends that formally organized groups display more "combat

readiness" and are, therefore, in a better position to employ violence. On the other hand, Piven and Cloward (1977) claim that such organizations channel spontaneous actions by rank-and-file participants into orderly and predictable outlets, which defuses the potential for violence. Union organization may curb violence for another reason. Workers empowered by organization will have less reason to resort to violence to secure their demands. Their resources will help workers hold out longer, and their strength in numbers will deter replacement workers from crossing picket lines. Thus, despite conflicting possibilities, we predict a negative association between union organization and violence.

These apparently contradictory expectations for the effect of union organization may each have a germ of truth. If so, union membership may actually have a curvilinear (U-shaped) relationship to violence. That is, violence may be most likely when union membership is very low and very high (i.e., when power relations between workers and employers are unequal) and least likely when union membership is in the intermediate ranges. Since union organization taps the power resources available to workers, we reason that violence is likely when workers are at a severe power advantage or disadvantage to employers. Violence is least likely when there is a rough balance between the power resources of workers and employers, perhaps when union organization is at intermediate levels.

Another indicator of working-class organization and activism is workers' propensity to strike. Workers who strike frequently may be disinclined to engage in violence because they and their employers are hardened to the realities of industrial conflict. Familiarity with the repertoires of conflict leads both workers and employers to develop scripted strategies for resolving industrial disputes peaceably. In industries in which they are relatively infrequent, strikes are likely to be defensive actions by workers. The relative inexperience of workers in mounting successful strike actions may undermine a disciplined plan of action, or employers may overreact to what is a relatively rare occurrence; either or both can lead to violence. This expectation runs counter to the idea espoused by Kerr and Siegel (1954) that workers in isolated industries (e.g., coal mining) tend to engage in strikes more frequently and tend to display more violence but is supported by Shorter and Tilly's (1971) and Snyder and Kelly's (1976) findings refuting the Kerr-Siegel hypothesis. Hence, we predict that violence will be negatively related to strike propensity in the industry.

We suspect that strike frequency, like union organization, may have a curvilinear (U-shaped) association with strike violence. If strike frequency taps the power resources of workers, violence may be most likely in low- or high-strike industries. When strikes occur in low-strike indus-

tries, workers may lack the resources, experience, or discipline to counter employer strategies and thus be susceptible to violence. Likewise, when strikes are frequent, strikes may turn violent because of the workers' power advantage. The curvilinear hypothesis suggests that violence will be unlikely in contexts with medium levels of strike frequency in which the power resources of workers and employers are roughly equal.

Strike Situation

Following our situational perspective, we find that violence may result from factors endemic to the strike situation itself. Two specific features identified here are state regulation of industrial disputes and the issues over which strikes are conducted. One unique feature governing strike behavior in Ontario is the compulsory conciliation process. Strikes that take place outside the legally sanctioned period—during an existing contract, the preconciliation negotiations, the conciliation period itself, or the postconciliation waiting period—are more likely to be violent. Similarly, strikes over union recognition, which are also illegal, are likely to be violent.

In their study of Italian strike violence, Snyder and Kelly (1976) found that, while there was no effect of strike issue per se, multiple-issue strikes were more likely to become violent than were single-issue strikes. Despite their negative findings for the effect of strike issues, there is good reason to believe that ideological conflicts over such issues as union recognition and conditions of work are more likely to be violent than material conflicts about wages and hours of work (Taft and Ross 1969; Coser 1956; Aubert 1963). Material conflicts are inherently more conducive to compromise than are ideological conflicts that involve demands for qualitative changes in the workplace. Thus, since conflicts over union recognition and conditions of work may be more intractable than conflicts over wages and hours, we expect the former to be more likely contexts for violence.

Skill Mix of Workers

Previous research has alluded to, but not rigorously analyzed, the potential effect of the skill mix of striking workers on strike violence. Skilled workers, the "aristocracy of labor," typically hold a monopoly of skills that lends conservatism to their relations with employers (Form 1985). Because of their position in the labor market, skilled workers can restrict the supply of labor to their employers and thereby coerce employers to accede to their demands peaceably. Semiskilled and (especially) unskilled workers, by contrast, face more competition in the labor market since

other workers can easily be trained for their jobs. Lacking the job skills of skilled workers, semiskilled and unskilled workers have lower job security and are likely to resort to more militant tactics to protect their jobs against potential strikebreakers. All else being equal, we expect unskilled workers to be most prone to violence, followed by semiskilled workers, then by skilled workers.

Of course, strikers at any particular plant are not uniformly skilled, semiskilled, or unskilled. Rather, there are likely to be unique skill mixes among striking workers that will affect the propensity for violence. Fortunately, our Ontario data contain the occupational data necessary to assess the role of various contributions of unskilled, semiskilled, and skilled workers to violence. We expect that strikes involving unskilled workers only will be more violent than strikes involving other combinations. When either semiskilled or skilled workers join unskilled workers, the bargaining position of unskilled workers is enhanced by association, which reduces the chances of violence.

Worker Strategies

Workers' strategies may consciously or unconsciously incite violent confrontations. First, strikers may try to broaden the strike's scope by picketing premises other than the employer's, especially if they are unsuccessful in halting production at the struck plant with routine picketing. Picketing customers, suppliers, and other locations of the struck company are strategies for publicizing workers' grievances to wider audiences. However, aggressive tactics like these may also incite aggressive responses from employers and lead to violence.

Following Shorter and Tilly (1971) and Snyder and Kelly (1976), we expect strikes to be more violent when they are large. Strikes involving many strikers inevitably create problems of discipline for strike organizers (Shorter and Tilly 1971). Large, collective demonstrations of strength can easily turn violent because sheer size affords more opportunities for unruliness.

Strike violence may also be related to the strike-participation rate, that is, the ratio of striking workers to workers eligible to strike. As Snyder and Kelly suggest (1976, pp. 147–48), the strike-participation rate and strike size are conceptually distinct measures. Indeed, for some purposes, the strike-participation rate is more useful since it measures the success of workers in getting everyone in the struck plant to support the strike. One-hundred-percent participation in the strike severely cripples the employer's ability to keep the enterprise running during the strike. Thus, we expect the strike-participation rate to be *inversely* associated with strike violence. Net of strike size, strikes are less likely to be violent

when workers are (nearly) unified in support of the strike. When strike participation is low, some workers may attempt to cross picket lines to work, which increases the likelihood of violence.

Snyder and Kelly (1976, n. 29) suggest that both strike size and strike-participation rates may have curvilinear relationships to violence. Following the power-balance argument outlined above (see Korpi 1974), we anticipate that strike size might display a U-shaped association with strike violence. In other words, violence is likely to break out when the number of workers is either very small (because they are overpowered by employers) or very large (because of the problem of coordinating large numbers). As for strike-participation rates, however, we expect a Ω -shaped association with violence. That is, violence is most likely when strike participation is in the intermediate range. In such cases, the work force is roughly divided in its support for the strike, and there are likely to be confrontations as nonstrikers try to cross picket lines to work. When strike participation is low, strikers are unlikely to confront nonstrikers and provoke violence. When strike participation is high, nonstrikers are likely to respect picket lines and stay away from work without violence.

Employer Strategies

Employers may adopt strategies that provoke violence. The employer tactic most likely to provoke a violent response is the attempt to keep the enterprise running at a partial or a normal level during the strike. Aside from the obvious symbolic meaning of this action, keeping the enterprise running may lead directly or indirectly to violence. Trying to maintain plant operations may involve nonstriking workers' crossing picket lines or the hiring of outside replacements for strikers. In either case, violent confrontations with strikers determined to keep the plant shut down are likely. Often, employers utilize police to escort nonstrikers across picket lines. The very presence of police is likely to aggravate a heated situation and lead to violence. Thus, we expect that, to the degree that employers seek to maintain the full operation of the plant, violence will be likely.

Another strategy used by employers is simply to wait out strikers by failing to accede to their demands. The strike literature shows that the longer a strike lasts, the more the advantage swings to employers. Employers often accumulate resources to withstand long work stoppages by building up their inventories before the strike (Canadian Industrial Relations and Personnel Developments 1977). Workers and their families, conversely, typically have resources to withstand only short stoppages. The longer a strike lasts, the more likely frustration or tactical changes by either employers or workers may lead to a violent outbreak.

Hence, like Shorter and Tilly (1971) and Snyder and Kelly (1976), we expect a positive association between strike duration and violence.

DATA AND METHODS

In this research we test the relative effects of these factors, using unique data on strikes that occurred in Ontario between 1958 and 1967. In July 1967, the Ontario provincial government sent questionnaires to employers and unions throughout Ontario who had been involved in 1,786 strikes between January 1958 and May 1967. Both employers and unions were given the opportunity to answer questions about the strike, including length, strike issues, participation, and other matters. The questionnaires were retrospective in nature, meaning that employers and union representatives were asked to respond to questions about strikes that had been conducted, in some cases, 10 years earlier. A total of 677 of the employer questionnaires (37.9%) and 298 of the union questionnaires (16.7%) were returned, which yielded information from one or both sources for 791 strikes. Because of the poorer response rate for the union questionnaires, we restrict our analysis to data from the employer questionnaires. Because of missing data on several variables, only 443 out of 677 employer-response cases remain in our models below.

Like many data on social movements, these data contain certain biases. For instance, company officials may have changed since the strike occurred or few records may have been kept, which leads to poor recall of important events. We expect, however, that poor recall or mortality of respondents is reflected primarily by low response rates on the questionnaires rather than by faulty data. To correct for possible bias created by differential response rates, we weighted the sample in inverse proportion to the annual response rate.²

Still, these limitations are no greater than those that have plagued other data used to study industrial violence.³ For instance, Shorter and

² As we report below, two statistical procedures were used in the analysis: OLS regression analysis and maximum-likelihood ordered-probit analysis. Weighting was only possible for the OLS analyses when we used the SPSS-X procedure "WEIGHT" (leading to a slight difference in the number of cases reported for the two techniques—443 vs. 441). In the OLS analyses, we found only trivial differences between weighted and unweighted results.

³ We compared our data with limited data available from public sources on Ontario strikes in order to detect possible sources of bias due to sample selectivity and found evidence that there may be some such biases. Although the distribution of strikes by industry in our sample roughly approximates the distribution in Ontario as a whole for the study period, strikes in our sample were slightly larger and longer in duration than those in Ontario as a whole. This was greater in the earlier years of the analysis. Further examination revealed that a few large strikes each year skewed the average

Tilly's (1971) sample of 88 well-publicized violent strikes in France lacks the representativeness of our data and has an undesirably low number of cases for multivariate analyses. Snyder and Kelly's (1976) data were originally collected by the Italian government, which was predisposed to curtail union insurgence and violence. The Ontario source used here is valuable because it provides strike-level data in a representative advanced industrial country in the post-World War II era. Our data set contains a wider range of variables than any previous quantitative analysis of industrial violence.

Dependent Variable

Our measure of violence is an ordinal measure of picketers' conduct as reported by company officials. Employers' evaluations of picketers' behavior are used to represent escalating stages of *violence* and are coded as follows (with percentage distributions in parentheses): peaceful conduct = 1 (46.5%), blocked plant entrance = 2 (23.3%), threatened to damage property or injure persons = 3 (11.8%), did actual damage to property = 4 (13.6%), and did actual injury to persons = 5 (4.8%). That only a small percentage of strikes show the most extreme form of violence confirms our expectations that most strikes during this era were relatively peaceful. Also, because the distribution of our dependent variable is highly skewed, we transform the variable by taking its natural logarithm, the recommended strategy when ordinal dependent variables with skewed distributions are predicted with OLS regression (O'Brien 1979). Our conceptualization of violence as an ordinal measure is superior to the simple dichotomous measure used by Shorter and Tilly (1971) and Snyder and Kelly (1976). It recognizes that violence is a continuous concept and that actions such as blocking a plant entrance, however symbolic, may pose a real threat to persons trying to gain entry or may serve as a pretext for authorities to initiate violence.

Independent Variables

We expect certain aspects of the political and economic climate to have an effect on the degree of violence. Indicators of political context include the *percentage of Liberal seats* in the Canadian parliament to index pro-labor representation and a dummy variable for *election year*.

number of strikers and person days lost above the annual average. As we show below, both size and length of strike are associated with higher levels of violence. Consequently, our sample may inflate the degree of violence in Ontario strikes as a whole

One economic factor discussed above is tapped by the national *unemployment rate*, lagged one year. In our original models, we used the contemporaneous value for unemployment but found unacceptable levels of multicollinearity between that variable and the measure for percentage of Liberal seats. Still, the one-year lag likely reflects the approximate time it takes for changes in the labor market to affect workers' bargaining leverage with employers. Our indicator of the economic standing of workers is the *percentage change in real earnings* of workers in the industry to which the strike occurs. This measure is suggested by Rees (1952) and Ashenfelter and Johnson (1969), among others, to reflect short-term changes in workers' standard of living. It is also employed in Snyder and Kelly's (1976) study of Italian strike violence to measure short-term changes in the cost of living. Real earnings are derived by standardizing an industry's average annual earnings by inflation.

Union organization is measured as the *percentage of unionized workers* in the industry in which the strike occurs. In our first set of models, we test only the linear relationship between union organization and violence. However, later we attempt to reconcile the conflicting hypotheses offered by Piven and Cloward (1977) and Gamson (1975) by positing a curvilinear relationship between union organization and violence (i.e., we include a squared term for union organization along with the main effect in our model). Similarly, *strike frequency* is measured at the industry level as the number of strikes occurring per 1,000 workers in the industry. As with the union-organization measure, we first test the simple linear relationship and then the curvilinear relationship.

The context of labor strikes in Canada is uniquely affected by the compulsory conciliation process. Our earlier reasoning led us to expect strikes occurring outside the legally sanctioned period to be more violent because of (a) the highly legalistic posture traditionally taken by Canadian employers and (b) the tendency for illegal strikes to divide strikers' ranks. We use six dummy variables to tap the role of state regulation of strike activity: whether strikes occurred (a) *during the legal period* (the reference category), (b) *prior to recognition or certification*, (c) *during an existing contract*, (d) *during preconciliation negotiations*, (e) *during the conciliation period*, and (f) *during the postconciliation waiting period*. We expect violence to be greater in each of the latter five periods than during the legal period.

The effects of strike issues will be tested using dummy variables for each of three types of strikes: *wages and hours* (the reference category), *union recognition*, and *conditions of work*. Strikes over union recognition and conditions of work come closest to approximating the ideological struggles that Shorter and Tilly (1971) suggest are likely to be more violent. Our coding strategy must be flexible enough to account for the

fact that some strikes involve multiple issues. We therefore developed a hierarchical coding scheme such that, if multiple-issue strikes involved union recognition at all, the strike was coded as union recognition. If the strike involved both working conditions and wages but not union recognition, the strike was coded as conditions of work. Only purely wages-and-hours strikes were coded wages and hours. This is consistent with our expectation that strikes involving ideological issues such as union recognition and working conditions are inherently more difficult to resolve and more prone to violence.

Both Shorter and Tilly (1971) and Snyder and Kelly (1976) found that workers with tightly knit and disciplined organizations are less prone to violence. However, these attributes are better tapped by occupational criteria than by the industrial criteria used by these authors. We believe that violence will be inversely associated with the skill level of striking workers because of skilled workers' relatively privileged position in the labor market. We test this notion with a set of dummy variables indexing different combinations of unskilled, semiskilled, and skilled workers. In our analysis, strikes involving only unskilled workers are used as the reference category. Strikes involving each of the other six possible combinations (*semiskilled only*, *skilled only*, *unskilled and semiskilled*, *unskilled and skilled*, *semiskilled and skilled*, and *unskilled, semiskilled, and skilled*) are tapped with separate dummy variables. We predict that each of the dummies will have a negative effect on violence.

Workers' picketing tactics are tapped by three dummy variables that indicate whether strikers picketed the *employer's suppliers*, the *employer's customers*, or *related plants* of the struck company. Since strikers can theoretically adopt each strategy, all three dummies are included in the models below. We expect each of these strategies by workers to be positively associated with violence.

Our measure of *strike size* is the logged number of strikers, that is, workers who honor the strike. Because we expect this variable's effect on violence to be nonlinear, we use the log transformation. As we do with union organization and strike frequency, we test both the linear and curvilinear relationships between (logged) strike size and violence. Organizational strategies that serve as symbolic demonstrations of strength are important in that they represent workers' strength and unity, diminishing the potential for violence. This symbolic strength, the *degree of strike participation*, is measured as total strikers divided by total employees in the struck plant. This variable is also tested both linearly and curvilinearly in the models below.

As for resources available to employers, we utilize an ordinal measure of *degree of plant operation* that ranks strikes according to whether the plants being struck operated not at all, partially, substantially, or at full

capacity. The higher the score on this measure, the closer to full capacity the plant operated during the strike. *Duration* is measured as the logged number of days the strike lasted and is expected to be positively related to violence. This variable is logged in order to correct for its highly skewed distribution and because we expect its association with violence to be nonlinear.

Table 1 summarizes the operational definitions, predictions, and sources for all variables in the analysis.⁴ Because the direction of effects is predicted for all variables, we utilize one-tailed tests of statistical significance.

Method

The fact that our dependent variable is an ordinal variable raises some interesting questions about the method of analysis. There is a continuing and, as yet, unresolved debate about the appropriateness of using OLS regression analysis in these cases. On one side, some argue that multivariate methods for interval-level variables can be used with ordinal dependent variables since the accessibility and flexibility of these techniques outweigh the biases they introduce (O'Brien 1979; Kim 1975, 1978; Borgatta 1968). Conversely, some see the biases created by using interval-

⁴ Some readers of an earlier version of this article had concerns about the reliability of data from employers as compared with those of union respondents, concerns that we shared. We analyzed the correlations of variables provided by employers with analogous variables provided by the unions. All correlations were positive, but the magnitudes varied markedly. Among the independent variables, there was most agreement on the length of the strike and the number of strikers involved ($r \geq .90$), which were two of the key determinants of strike violence. Conversely, the correlations between employers' and unions' accounts of picketing of customers, suppliers, and other plants were .40, .15, and .11, respectively. Finally, the correlations between employers' and unions' accounts of violence was about .47, which is not high but is perhaps higher than one would expect for such a sensitive issue. As expected, employers' accounts of violence were typically higher than unions' accounts. However, we noted earlier that employers reported the most extreme incidence of violence—actual injury to persons—in only 4.8% of the cases, a figure that compares favorably with the 2% figure reported by Shorter and Tilly (1971) and the 11% figure reported by Snyder and Kelly (1976). Hence, there is little basis for believing that employers grossly exaggerated the incidence of violence. We caution that these correlations are based on a relatively small number of cases (120–140) for which both employer and union questionnaires were returned with valid data. We are aware of the imperfections of using only questionnaires from employers but, on balance, feel that they are not damning. Because the questionnaires are retrospective, employer responses are likely to be more reliable than union responses. Employers typically keep permanent records of such events, have more continuity of leadership, and have a longer institutional memory than unions, which, in some cases, may have been decertified or merged into larger entities. Pending the availability of better data from more objective sources, we are inclined to accept these data as reasonably reliable.

TABLE 1
VARIABLE SUMMARY AND MAIN EFFECTS PREDICTIONS

Variable	Predicted Direction	Definition
Violence*		Natural logarithm of scale of picketing conduct where 1 = peaceful conduct, 2 = obstruction of entrance, 3 = threatened property or people, 4 = damaged property, and 5 = injured persons
Percentage Liberal seats†	+	Percentage of Liberal seats in Canadian Parliament
Election†	-	Election year (1 = yes, 0 = no)
Unemployment‡	+	Unemployment rate ($t - 1$)
Change in earnings‡	-	Change in real earnings of industry's production workers
Percentage unionized‡	-	Percentage of industry unionized
Strike frequency‡	-	Number of strikes per 1,000 workers in an industry
Legal status of strike *		
During legal period		Strike beginning during legally sanctioned period (reference category)
Prior to recognition or certification	+	Strike prior to recognition or certification (= 1)
During existing contract	+	Strike beginning during existing contract (= 1)
During preconciliation negotiations	+	Strike beginning during negotiations prior to conciliation (= 1)
During conciliation period	+	Strike beginning during conciliation period (= 1)
Postconciliation waiting period	+	Strike beginning during waiting period after conciliation (= 1)
Strike issues *		
Wages and hours		Exclusively wages-and-hours issues (reference category)
Union recognition	+	Union-recognition issues (1 = yes)
Conditions of work	+	Conditions-of-work issues (1 = yes)

TABLE 1 (Continued)

Variable	Predicted Direction	Definition
Skill mix of workers.*		
Unskilled only		Strike involves unskilled workers only (reference category)
Semiskilled only	-	Strike involves semiskilled workers only (= 1)
Skilled only	-	Strike involves skilled workers only (= 1)
Unskilled and semiskilled	-	Strike involves unskilled and semiskilled workers (= 1)
Unskilled and skilled	-	Strike involves unskilled and skilled workers (= 1)
Semiskilled and skilled	-	Strike involves semiskilled and skilled workers (= 1)
Unskilled, semi-skilled, and skilled	-	Strike involves unskilled, semi-skilled, and skilled workers (= 1)
Picketing tactics:*		
Picketing customers	+	Picketing employer's customers (1 = yes, 0 = no)
Picketing suppliers	+	Picketing employer's suppliers (1 = yes, 0 = no)
Picketing related plants	+	Picketing related plants of employer (1 = yes, 0 = no)
Strike size*	+	Logged number of strikers
Strike participation*	-	Number of strikers divided by number of employees in struck unit
Duration*	+	Logged number of days strike lasted
Degree of plant operation*	+	Ordinal scale using 1 = none, 2 = partial, 3 = substantial, and 4 = full

Sources.—* Rand 1968, † Thorburn 1972; ‡ Statistics Canada 1973

level methods on ordinal variables as unacceptable and argue for the use of special techniques like maximum-likelihood ordered-probit analysis (Winship and Mare 1984; O'Brien 1982; Sommers 1974). We are sensitive to both sides but, given the unresolved nature of the debate, are inclined to believe that OLS regression is acceptable in most cases. Nevertheless, in the analyses below, we utilize both OLS and ordered-probit to test our hypotheses. With one important exception that we note, we found no substantive differences between conclusions derived from OLS and ordered-probit models.

ANALYSIS

In table 2 we test the relative effects of the independent variables with a sequential model estimating strike violence. Columns 1–5 show the results using OLS regression. Each of these analyses was replicated using ordered probit, and the final model from this set is shown in column 6. A comparison of columns 5 and 6 shows no substantive differences in the final results between the two techniques. This was also the case for the ordered-probit analogues to the analyses reported in columns 1–4. Therefore, in discussing the findings, we refer only to the OLS results.

In columns 1–5, we successively add to a basic model containing only the contextual variables (col. 1), variables representing the legal status of the strike (col. 2), the strike issues (col. 3), the skill composition of the striking workers (col. 4), and, finally, variables indexing worker and employer strategies (col. 5). Using this sequential strategy, we can detect the extent to which the effects of certain factors are suppressed or explained by variables entered into the model at a later stage. This issue is particularly important for evaluating the ultimate effect of the contextual variables since, as noted earlier, other research has found their effects to be small compared with strike-level variables.

In model 1 we see that both political variables have significant effects in the direction predicted by our theory. Liberal representation in Parliament is positively related and election years negatively related with strike violence. This coincides with our earlier expectation that workers may resort to violence when they are unlikely to be repressed by the incumbent state regime and when other available channels for venting social and economic grievances (such as elections) are not available. The negative election-year effect also reflects the aversion of workers, employers, and political incumbents to initiating violence during politically sensitive election years. Both findings underscore the effects of labor's institutionalization into the polity in the postwar period. To the extent labor has become incorporated into the system as a legitimate actor, workers are sensitive to the realities of political institutions and resort to violence accordingly.

TABLE 2
SEQUENTIAL OLS REGRESSION MODELS AND ORDERED-PROBIT MODEL FOR STRIKE VIOLENCE

	OLS Regression Models					Ordered Probit
	(1)	(2)	(3)	(4)	(5)	(6)
Percentage Liberal seats	002*	002*	001	001	002*	6.2E - 5**
Election	-152**	-154**	-148**	-144**	-133**	-346**
Change in earnings	-032**	-029**	-026*	-022*	-015	-006
Unemployment	2.065	2.388	2.794	3.298	1.933	327.479
Percentage unionized	-098	-062	-043	-054	014	-057
Strike frequency	-296.742	-299.487	-285.291	-253.865	-434.961	-3.880
Legal status of strike						
Prior to recognition or certification		-046	-104	-067	.053	470
During existing contract		-076	-142	-134	068	393
During preconciliation negotiations		-205	-238*	-242*	059	403
During conciliation period		-067	-085	-057	.083	137
During postconciliation waiting period		398**	403**	.428**	416**	2.352**
Strike issues						
Union recognition			121**	145*	062	187
Conditions of work			095	079	008	034

We find that, as predicted, workers' real earnings have a statistically significant negative effect on the incidence of violence. This effect suggests that workers may be pushed into violence by economic hardship as reflected in a deteriorating standard of living. On the other hand, the lagged unemployment variable is not significant in model 1 although it is in the expected (positive) direction. Similarly, neither of the class-organization variables, percentage unionized or strike frequency, is statistically significant here although both show the expected negative signs.

In model 2, we show the results of adding the dummies for the legal status of the strike. Of these, only strikes that began during the postconciliation waiting period are more violent than the reference category (legal period) as predicted. At this stage, all other legal status dummies are in the opposite direction from what we predicted, but none achieve statistical significance. All three significant contextual variables from model 1 remain significant here.

Model 3 reports results of adding the two strike-issue dummies to the previous model. Of these two variables, only strikes over union recognition have a significant effect on violence. The relationships observed in model 2 are the same with the exception that the dummy representing strikes that occurred during the preconciliation negotiations shows a strong effect in the unexpected (negative) direction and, in fact, would be significant at the .05 level when a two-tailed test is used. This effect is perhaps explained by the fact that, prior to the conciliation period, both sides refrain from aggressive actions that might hurt their case during conciliation. We note, however, that this variable does change signs and becomes nonsignificant in the full model (model 5).

Model 4 includes dummies representing the workers' skill composition and provides strong evidence for our prediction that skill mix is a key determinant of violence. Indeed, strikes are less violent if they do not involve exclusively low-skilled workers, except in cases in which workers from all three skill levels strike together. We also note that including the skill variables renders the union-recognition-issue variable nonsignificant, which implies that the latter's significant effect in model 3 is an artifact of the skill composition of workers who strike over union-recognition and jurisdictional issues.

In model 5, we see that adding the worker- and employer-strategy variables adds greatly to the model's explanatory power. The change in R^2 from .121 to .307 between models 4 and 5 can be attributed largely to the significant effects of picketing suppliers and related plants, strike participation, number of strikers, duration of the strike, and degree of plant operation, all of which are in the expected direction. Of this set only picketing customers fails to achieve significance, which suggests that workers may moderate their tactics when customers are involved. Judg-

ing from the standardized coefficients, the degree of plant operation is the strongest relative effect in the full model.

In the final model, only Liberal party representation and election year are significant among the contextual variables. The previously significant effect of change in real earnings is rendered nonsignificant and, apparently, explained by the worker- and employer-strategy variables. In other words, employer and worker strategies that lead to violence are conditioned by economic circumstances that are unfavorable to workers. Thus, while the importance of political factors in determining the likelihood of strikes has decreased relative to economic factors in the post-World War II period (Snyder 1975, 1977), political factors nonetheless continue to have a stronger direct effect on violence.

The worker- and employer-strategy variables also erase the unexpected finding reported earlier that strikes during preconciliation negotiations are less violent. It is important that all of the legal-status variables are now in the predicted (positive) direction, but only the dummy for the postconciliation waiting period is significant. This suggests that the waiting period is a particularly frustrating and, perhaps, counterproductive component of the compulsory conciliation process.⁵ As in model 4, none of the issue variables are significant, which reinforces our earlier hunch that the previously significant union-recognition variable is explained by the skill composition of workers who tend to engage in such strikes. Five of the six dummy variables tapping skill mix are significant and positive in the final model. The magnitude of the coefficients among the skill-mix variables coincides roughly with our earlier speculation that the involvement of only skilled workers, for instance, does more to reduce violence than does the involvement of only semiskilled workers. The single exception to this pattern—strikes that simultaneously involve skilled, semiskilled, and unskilled workers—requires a special explanation. There seem to be special problems in maintaining discipline on the picket lines with an occupationally mixed work force because this group is not significantly less violent than the excluded category of unskilled workers only. Perhaps different occupational interests lead to different expectations about the goals of the strike. In any event, this is the only skill variable that does not coincide with our general expectation that unskilled workers striking alone are universally more prone to violence than are other skill combinations.⁶

⁵ We conducted an *F*-test to determine whether the set of legal status variables as a whole was statistically significant and determined that it was not ($F_{3,422} = 1.83$). However, when the model was reestimated with the four nonsignificant dummies dropped, the postconciliation waiting period dummy by itself was significant.

⁶ An *F*-test revealed that the set of skill-composition dummy variables was a statistically significant determinant of violence ($F_{6,422} = 3.15$).

We previously suggested that four variables in our model—percentage unionized, strike frequency, strike size, and strike participation—may have curvilinear, rather than linear, relationships with violence. Table 3 shows analyses that test for the presence of curvilinear relationships between strike violence and each of the four variables of interest taken separately (cols. 1–4) and as a set (col. 5). We report results from OLS regression analyses in part A and results from ordered probit analysis in part B. To conserve space, we omit from the table the coefficients obtained from other independent variables. However, the significance levels of these variables remained essentially unaltered from the results shown in columns 5 and 6 of table 2.

The analyses in table 3 provide only limited support for the curvilinear relationships we anticipated. Percentage unionized, strike frequency, and strike size are all nonsignificant. The latter two of these are in the direction opposite that of predictions and not close to statistical significance. However, percentage unionized comes quite close to statistical significance in both the OLS and ordered-probit models. Experimentation with a number of model variations (not shown) indicated that these null results are somewhat contingent on model specification and suggested that this relationship is certainly worth consideration in future research. A better measure of this concept than the industry-level measure available to us might yield more definitive results.

We find stronger, but still qualified, support for the hypothesized Ω -shaped relationship between strike participation and violence. Here, we encounter the lone significant discrepancy between our OLS and ordered-probit analyses. In models 3 and 5, using OLS regression (part A), the Ω -shaped relationship is statistically significant at $P \leq .05$. However, in comparable models using ordered probit (part B), the main effect for strike participation barely fails to achieve statistical significance. Our conclusion for this variable, then, must also remain in doubt, but we suggest qualified support for Snyder and Kelly's (1976, n. 29) hunch that strike violence is reduced when strike participation is either very low or very high. When strike participation is in the middle ranges, there are likely to be confrontations, presumably between strikers and workers trying to cross picket lines. Summarizing our findings for the curvilinear relationships, we find that the support is weak for two variables (strike frequency and strike size) and inconclusive, but worthy of further investigation, for two others (percentage unionized and strike participation).

CONCLUSIONS

Empirical case studies of violence such as ours are rare and hence valuable because they add historical specificity to social-movement processes

TABLE 3
OLS REGRESSION MODELS AND ORDERED-PROBIT MODELS TESTING FOR CURVILINEAR RELATIONSHIPS

A OLS REGRESSION MODELS PREDICTING STRIKE VIOLENCE TESTING FOR CURVILINEAR RELATIONSHIPS, UNSTANDARDIZED COEFFICIENTS (Standardized Coefficients in Parentheses, $N = 443$)					
	Model 1	Model 2	Model 3	Model 4	Model 5
Percentage unionized	-.845 (-.236)	.003 (9.149E-4)	.020 (.006)	.029 (.008)	-1.020 (-.285)
Percentage unionized squared	1.084 (.248)				1.301* (.298)
Strike frequency	-256.418 (-.038)	-4.164 (-6.179E-4)	-467.119 (-.069)	-441.492 (-.066)	672.677 (.100)
Strike frequency squared		-1,235,548.228 (-.064)			-2,668,378.236 (-.139)
Strike size	.029 (.081)	.033*	.034* (.094)	.101 (.283)	.088 (.247)
Strike size squared				-.007 (-.193)	-.006 (-.169)
Strike participation	-302* (-.102)	-.338**	1.646* (.557)	-.355* (-.120)	1.628* (.551)
Strike participation squared			-1.467* (-.686)		-1.435** (-.671)
Intercept	478	380	-128	258	-161
R ²	.311	.307	.318	.309	.325

TABLE 3 (Continued)

B ORDERED-PROBIT MODELS PREDICTING STRIKE VIOLENCE TESTING FOR CURVILINEAR RELATIONSHIPS, STANDARDIZED COEFFICIENTS (N = 441)					
	Model 1	Model 2	Model 3	Model 4	Model 5
Percentage unionized	-4.953	-218	033	064	-7.646
Percentage unionized squared	7.539				11.554
Strike frequency	-2.193	6.638	-4.122	-3.980	15.936
Strike frequency squared		-81.002			-134.956
Strike size	065*	.029*	028*	077	.067
Strike size squared				-5.403E - 4	-4.697E - 4
Strike participation	-1.176*	-1.848**	5.903	-1.915**	5.942
Strike participation squared			-4.234*		-4.211*
-2 × (log likelihood)	1,056.3	1,056.7	1,054.1	1,056.3	1,050.0
R ²	.334	.335	.349	.334	.350

NOTE.—Other variables included in the model but not shown are percentage Liberal seats, election, change in earnings, unemployment, the five legal-status dummy variables, the two strike-issue variables, the six skill-composition variables, the three picketing variables, strike duration, and degree of plant operation.

* $P \leq .05$, one-tailed test.

** $P \leq .01$, one-tailed test.

that researchers sometimes ignore or take for granted. As such, studies of this sort help refine and extend existing social-movement theories. In this article, we have argued that past studies of violence within the RM framework are incomplete since they focus almost exclusively on the violent tactics of groups outside the polity. More research on the determinants of violence by weak-insider groups is needed because violent tactics are not necessarily discarded by groups once they gain entry into the polity. Generally, violence may still be employed by such groups as a last-resort tactic. Weak insiders that are well organized and disciplined, are able to fend off challenges from other contenders, and have the support of critical third parties have little incentive to be violent. Such groups do, however, resort to violence when their positions are seriously threatened by the tactics of other contending groups.

We tested this general argument by examining the causes of strike violence in Ontario during a period when organized labor was widely recognized as a legitimate representative of the working class. Findings were largely consistent with our thesis that violence can be explained from a situational perspective that incorporates salient features of the social context, the legal structures regulating strike behavior, and the tactics and countertactics of conflict groups. Worker strategies were found to be important in explaining the emergence of violence. For instance, the positive effects of certain picketing tactics (i.e., picketing suppliers and related plants) on violence suggest that employers respond to such tactics with equally aggressive strategies, which in turn lead to violence. Similarly, while raising large numbers of strikers for the union's cause has its advantages, it also creates problems of organization and discipline that are likely to incite violence. Employer countertactics also affect the level of violence: maintaining plant operations during the strike and resisting speedy settlements are key determinants of violence.

Various features of the strike situation can also affect the level of violence. Protest groups are not always homogeneous with respect to their position in the social structure and their tactical preferences; the skill composition of striking workers significantly affects their propensity for violence. Workers with valued skills can challenge employers from a position of strength and thus have less incentive to turn to violent tactics. Lower-skilled workers who face more visible sources of outside competition for their jobs are more likely to resort to violence. Striking groups with mixed skill composition show degrees of violence in rough proportion to the skill levels represented—with the single exception of the most heterogeneous groups (i.e., skilled, semiskilled, unskilled), which are about as prone to violence as are unskilled workers. Strikes over union-recognition issues are more likely to be violent, but this effect is explained by the skill composition of workers who happen to engage in such strikes.

Various features of the sociolegal context were found to be important determinants of strike violence. The fact that strikes tend to be most volatile during the waiting period following conciliation suggests that workers are frustrated by the results of the proceedings and by the recommendations for settlement and resort to violence. In keeping with our suggestion that recognized groups are careful not to alienate decisive third parties during critical political periods, we found that strikers tend to be less violent during election years. On the other hand, workers are more violent when the government is controlled by a prolabor party, a finding that comports with previous findings that repressive state regimes curtail strike violence. We suggested that violence may be more likely during prolabor regimes because workers know their actions are not likely to have serious repercussions.

We found modest evidence to support curvilinear relationships between the relative power resources of weak-insider groups and violence. The percentage of workers unionized in an industry reflects the expected U-shaped relationship with violence but barely fails to achieve statistical significance. The expected \cap -shaped relationship between strike participation and violence materializes, but its level of statistical significance is contingent on the statistical procedure used (OLS regression vs. ordered probit). On balance, there was enough promise in these findings to warrant future research. Until that is done, conclusive evidence for our expectation of a nonlinear association between resources and violence must wait.

In total, our finding that violence has not entirely lost its value as a tactical strategy for workers underscores the fact that labor is still only marginally incorporated into the polity. Weak-insider groups, to some extent, still use violence in a way that resembles outsider groups. The challenger-member dichotomy is actually a continuum that can help differentiate social-movement groups. Future case study research on the determinants of violence might focus on groups that occupy different points along this range. In particular, more research on violence by weak-insider groups is needed so that we may determine the generalizability of our results. Studies like these will increase our understanding of individual movements and sensitize RM theory to the long-term dynamic processes of movements in general.

REFERENCES

- Ashenfelter, Orley, and George Johnson. 1969. "Bargaining Theory, Trade Unions and Industrial Strike Activity." *American Economic Review* 59 (March): 35-49.
- Aubert, Vilhelm. 1963. "Competition and Dissensus. Two Types of Conflict and of Conflict Resolution." *Journal of Conflict Resolution* 7 (March): 26-42.

- Borgatta, Edgar 1968. "My Student, the Purist: A Lament." *Sociological Quarterly* 9 29-34
- Canadian Industrial Relations and Personnel Developments 1977. *Newsletter*, December 7
- Coser, Lewis. 1956 *The Functions of Social Conflict*. New York: Free Press.
- Flood, Maxwell. 1972 "The Growth of the Non-institutional Response in the Canadian Industrial Sector" *Relations Industrielles* 27:603-15.
- Form, William 1985. *Divided We Stand*. Urbana: University of Illinois Press.
- Gamson, William 1975. *The Strategy of Social Protest*. Homewood, Ill.: Dorsey
- Huxley, Christopher. 1979. "The State, Collective Bargaining, and the Shape of Strikes in Canada" *Canadian Journal of Sociology* 4:223-39.
- Jamieson, Stuart. 1968 *Times of Trouble. Labour Unrest and Industrial Conflict in Canada, 1900-1966* Task Force on Labour Relations Study no. 22 Ottawa: Privy Council Office.
- Jenkins, J. Craig 1983. "Resource Mobilization Theory and the Study of Social Movements." *Annual Review of Sociology* 9:527-53.
- Kerr, Clark, and Abraham Siegel 1954. "The Interindustry Propensity to Strike—an International Comparison." Pp. 189-212 in *Industrial Conflict*, edited by Arthur Kornhauser, Robert Dubin, and Arthur Ross. New York: McGraw-Hill
- Kim, Jae-On 1975 "Multivariate Analysis of Ordinal Variables." *American Journal of Sociology* 81 261-98.
- . 1978 "Multivariate Analysis of Ordinal Variables Revisited" *American Journal of Sociology* 84 448-56.
- Korpi, Walter 1974. "Conflict, Power, and Relative Deprivation." *American Political Science Review* 68:1569-78.
- Lipset, Seymour M. 1963. *The First New Nation* New York: Basic.
- Lipset, Seymour M., and William Schneider 1983. *The Confidence Gap: Business, Labor, and Government in the Public Mind* New York: Free Press.
- Misick, John D. 1978. "Compulsory Conciliation in Canada: Do We Need It?" *Relations Industrielles* 33:193-204
- O'Brien, Robert M. 1979 "The Use of Pearson's R with Ordinal Data." *American Sociological Review* 44:851-57
- . 1982. "Using Rank-Order Measures to Represent Continuous Variables." *Social Forces* 61 144-55.
- Piven, F., and R. Cloward. 1977 *Poor People's Movements*. New York: Pantheon
- Rand, Ivan C. 1968. *Report of the Royal Commission Inquiry into Labour Disputes*. Toronto: Queen's Printer.
- Rees, Albert. 1952. "Industrial Conflict and Business Fluctuations." *Journal of Political Economy* 60 (October). 371-82.
- Ross, Arthur M., and Paul Hartman 1960. *Changing Patterns of Industrial Conflict*. New York: Wiley.
- Shorter, Edwards, and Charles Tilly. 1971. "Le Déclin de la Grève Violente en France de 1890 à 1935." *Le Mouvement Social* 79 (July-September). 95-118.
- . 1974 *Strikes in France, 1830-1968*. New York: Cambridge University Press.
- Smith, Michael R. 1979. "Institutional Setting and Industrial Conflict in Quebec" *American Journal of Sociology* 85:109-34.
- Snyder, David. 1975 "Institutional Setting and Industrial Conflict: Comparative Analyses of France, Italy and the United States." *American Sociological Review* 40 (June): 259-78
- . 1977 "Early North American Strikes. A Reinterpretation." *Industrial and Labor Relations Review* 30 325-41
- Snyder, David, and William R. Kelly. 1976 "Industrial Violence in Italy, 1878-1903" *American Sociological Review* 82:131-62.

- Snyder, David, and Charles Tilly. 1972. "Hardship and Collective Violence in France, 1830 to 1960." *American Sociological Review* 37 (October). 520-32.
- Somers, Robert H. 1974. "Analysis of Partial Rank Correlation Measures Based on the Product-Moment Model. Part One." *Social Forces* 53:229-46.
- Statistics Canada. 1973. *Canada Year Book 1973*. Ottawa: Information Canada.
- Taft, Phillip, and Phillip Ross. 1969. "American Labor Violence: Its Causes, Character, and Outcome." Pp. 270-376 in *Violence in America. Historical and Comparative Perspectives*, edited by Hugh Davis Graham and Ted Robert Gurr. New York: New American Library.
- Thorburn, Hugh G. 1972. *Party Politics in Canada*. Scarborough, Ontario: Prentice-Hall.
- Vanderkamp, John. 1970. "Economic Activity and Strikes in Canada." *Industrial Relations* 9:215-30.
- Walsh, W. 1975. "Economic Conditions and Strike Activity in Canada." *Industrial Relations* 14:45-54.
- White, Robert. 1989. "From Peaceful Protest to Guerrilla War: Micromobilization of the Provisional Irish Republican Army." *American Journal of Sociology* 94:1277-1302.
- Winship, Christopher, and Robert D. Mare. 1984. "Regression Models with Ordinal Variables." *American Sociological Review* 49:512-25.

“Red” Unions and “Bourgeois” Contracts?¹

Judith Stepan-Norris

University of California, Irvine

Maurice Zeitlin

University of California, Los Angeles

What are the effects of the political consciousness of union leaders—and thus of the struggles they lead—in shaping the “political regime of production,” that is, the political relations through which the capital/labor relation in the sphere of production is defined, regulated, and enforced? In the prevailing functionalist theory, whether in its “pluralist” or “Marxist” variant, the effects are nil: union leaders cannot transcend the labor union’s inherent system-stabilizing functions (to routinize conflict, contain discontent, and “incorporate” the working class). In this article, an analysis of a sample of contracts won by U.S. industrial unions, 1937–55, shows that union leadership—left, right, and center—has substantial independent effects in determining the production regime. Specifically, the contracts won by Communist-led unions were far more likely, throughout the era, to be “pro-labor” (i.e., to undermine the sway of capital within production) than those won by their rivals.

Class relations in the sphere of production (or the “enterprise”) under contemporary capitalism tend to be explicitly political and governed by

¹ This is a joint work in the fullest sense, the authors’ names are in alphabetical order. We benefited immensely from the close reading and stimulating comments on earlier drafts of this article by Perry Anderson, Stanley Aronowitz, Jeremy Brecher, Michael Burawoy, Lewis A. Coser, the late Arthur J. Goldberg, Michael Goldfield, Howard Kimeldorf, John H. M. Laslett, Ruth Milkman, Julia C. Wrigley, and Robert Zieger. Richard Berk and Kazuo Yamaguchi generously provided us with indispensable technical advice regarding the logit modeling. Research support was provided by Zeitlin’s John Simon Guggenheim Memorial Foundation Fellowship, and by the Academic Senate and the Institute of Industrial Relations (IIR) at the University of California, Los Angeles. We are also grateful to Daniel J. B. Mitchell, IIR director, Archie Kleingartner, associate director, and Gloria Busman, coordinator of the IIR Labor Center, for their helpful counsel. A longer version of this article appears in the IIR’s Working Paper Series no. 176 (November 1989). Direct correspondence and requests for reprints to Judith Stepan-Norris, Department of Sociology, University of California, Irvine, California 92717.

a regime based on union-company agreements. In some countries, these agreements, specifying rights and obligations in production, take on the force of law, administered by specific quasi-representative/juridical institutions and reinforced by the coercive power of the state.² What, then, are the implications of the "institutionalization of class conflict" (Dahrendorf 1959, pp. 64–67) for the reproduction of class domination under contemporary capitalism—and especially for the potential political self-determination of organized labor?

At issue here, in particular, are the effects of the union in determining *the political reconstruction of the immediate production process*—and, thereby, of the "economic" relation between capital and labor. This is an inquiry, in other words, into "the *limits*" that organized labor can impose on capital's "*power, . . . and the character of those limits*" within the sphere of production (Marx 1973, 2:33; italics in original). What, specifically, is the import of the union's political leadership—and thus of its objectives, strategy, and tactics, and the struggles it leads—in limiting capital's power? Put differently, what are the independent effects of union leadership in shaping the "political regime of production," that is, the ensemble of political relations through which the immediate capital/labor relation is defined, regulated, and enforced?³ Can union leaders—especially radicals and socialists—influence the construction of the production regime in accord with their own political consciousness or their specific conceptions of working-class interests and the appropriate strategy to protect and advance them?

These questions guide our analysis, which aims, in short, "to assess the independent effects of political practices on the organized (or political)

² In Western Europe, collective bargaining often coexists with other political forms of mediation (e.g., codetermination). In the United States, the National Labor Relations (or Wagner) Act (NLRA) of 1935 "was passed only after the unparalleled organizing drives and mass strikes of the mid-1930s"—and upheld by the Supreme Court in 1937, following the great sit-downs in late 1936 (M. Zeitlin 1985, Goldfield 1989). The act gave employees the legal right (later restricted by the Taft-Hartley Act and other legislation) "to self-organization . . . [and] to bargain collectively through representatives of their own choosing," and required employers to bargain in "good faith." The National Labor Relations Board (NLRB) was given broad powers to oversee the law's operation and to adjudicate labor-management disputes. In 1947, Taft-Hartley made union-management agreements into contracts enforceable in federal courts and allowed either party to sue for breach of contract (Roberts 1971). On the relative unionization of various segments of the American working class, see Zeitlin (1989, chap. 7).

³ The term "political regime of production" appears in Burawoy (1985, pp. 19, 68); we have given it somewhat different conceptual content here (see Brighton 1977, pp. 4, 14, 16) and below in our delineation of its "contradictory tendencies." (For kindred formulations in other theoretical terms, see Dubin [1958, p. 153], Flanders [1968, p. 8], Marshall [1965], Selznick [1969, p. 154], Slichter [1941, p. 1].)

relations between classes" (Stepan-Norris and Zeitlin 1989, p. 505). This covers such substantive questions as the effects of the political practices of contending classes and class segments on the development of capitalism; the emergence of the democratic or authoritarian state; the labor process; and class formation (see, e.g., Moore 1968; Stephens 1979, 1989; Aminzade 1981; Zeitlin 1984; Skocpol 1980; Stark 1980; Stephens and Stephens 1982; Esping-Andersen 1985; Griffin, Wallace, and Rubin 1986).

Our analysis thus addresses the general theoretical problem of the "relative autonomy of politics." This refers "not merely to the possible autonomy (or originitive potential) of the 'state,' but rather, comprehensively, to the possible *independent effects of political phenomena in the shaping and transformation of basic social relations*. Of course, this is within the objective limits imposed and the objective alternatives made possible by the existing circumstances" (Stepan-Norris and Zeitlin 1989, p. 503; italics in original).⁴

We assess the effects of organized working-class political leadership in determining the political terms of the immediate capital/labor relation through a multivariate analysis of the collective bargaining agreements won by unions aligned with the left, right, and center of the Congress of Industrial Organizations (CIO).⁵

During the "Red decade" of the 1930s and beyond, through the early postwar years, Communists and their allies led "a powerful and pervasive radical movement in American life" (Starobin 1972, p. x). In particular, they established a broad base in the CIO. Thousands of Communists—whose "devotion, heroism, and selflessness . . . during these years can hardly be overestimated" (Howe and Coser 1957, p. 375)—participated in the concrete struggles and organizing drives of the late 1930s, and their "insurgent political practices" won them positions of power and trust in many CIO unions (Stepan-Norris and Zeitlin 1989). For most of the CIO's independent existence—until the early Cold War years, 1949–50, when 11 "Communist-dominated" unions were expelled and alleged Communists were purged from the leadership of many others—"the Communists were the best-organized political group within

⁴ Our earlier article (Stepan-Norris and Zeitlin 1989) and this one should be read in tandem, because much of what we say there is relevant here—especially in the common theme, that "men and women make their own history, although not just as they please nor under circumstances they choose" (p. 503).

⁵ The CIO was born in 1935 as the "Committee on Industrial Organization" of the American Federation of Labor (AFL); in the fall of 1936, the AFL suspended 10 unions affiliated with the CIO for advocating "dual unionism" and "fomenting insurrection," and they immediately started making their per capita payments to the now independent CIO. The latter and the AFL merged again in 1955.

the CIO" (Howe and Coser 1957, p. 375). They were influential at the local or national level in most of the CIO's 38 durable international unions; and 18 unions, representing at least 2 million workers and enrolling over 30% of the CIO's members, were probably in the so-called Communist political camp (for details, see Stepan-Norris and Zeitlin [1989, p. 506, n. 5]).

What effects did the Communists and their radical allies have on the consciousness and action of the organized working class during their sojourn at the helm of many of America's industrial unions? In particular, did their union leadership of "the class struggle within production" (Magdaline 1975, p. 60) tend to sustain or subvert the immediate subservience of labor to capital? This is our central substantive question—and it is also intrinsically a pivotal and controversial historical question that still arouses passions today, four decades after the defeat of the Communists and their allies in organized labor (see, e.g., Draper 1985*a*, 1985*b*, 1985*c*, 1985*d*; and Zeitlin and Kimeldorf 1984).

THE FUNCTIONALIST LABOR-RELATIONS PARADIGM

Within the prevailing paradigm, the answers to the questions posed here are not in doubt. Both pluralist and self-described Marxist analysts of labor relations, despite "sharply opposed valuations" of the outcome (J. Zeitlin 1985, p. 6), argue that the labor union, by routinizing conflict and containing discontent and thus reducing labor-market uncertainty and regulating labor costs, "incorporates" the working class and tends to stabilize the capitalist system. As Hugh Clegg, a leading British pluralist, remarks, "The pluralist can accept every word of . . . the Marxist theory of economism, or incorporation, or institutionalization. . . . The terminology may differ. . . . But translation is easy" (1979, p. 455).

Translation is easy because both sets of analysts, whether phrasing their arguments in the language of social harmony or of radical critique, share the same paradigmatic presupposition, namely, that the systemic needs of "modern industrial society" or of "corporate capitalism" generate the means of their own satisfaction. They assume, in particular, that the "institutionalization of class conflict" (cf. Aronowitz 1973, p. 218) necessarily contributes to the maintenance of the capitalist system.

Once "industrial unionism establish[es] itself in the corporate sector," as Michael Burawoy says, it is "*shaped in accordance with the needs of capital*," and thus tends merely to consolidate "factory regimes which *reproduce the capital-labor relationship more efficiently*" (1981, p. 104; 1983, p. 587, n. 11; italics added). Unions cannot "*challenge*" capitalism, Perry Anderson avers, but can "merely *express*" it, for they are confined within "insurmountable" limits that are "inherent in the[ir] nature"

(1967, p. 264; italics in original). In sum, as Stanley Aronowitz puts it (1973, pp. 256, 217), "unionism can be [no] other than a force for integrating workers" into the "corporate capitalist system" (cf. Löschke 1975).

This argument is also made in pluralist terms. Collective bargaining is a bulwark of "democratic capitalism," says Frederick Harbison, because it "provides a drainage channel for the specific dissatisfactions and frustrations which workers experience on the job" (1954, p. 274). Similarly, Daniel Bell tells us that "in the evolution of the labor contract, the union becomes part of the 'control system of management' " and performs "a vital function" as "a buffer between management and rank-and-file resentments" (1961, pp. 214–15; see Drucker 1950, pp. 134–35; Dubin 1954).

Collective bargaining, it is assumed, must result in merely marginal changes in the employment relation because in principle both union and employer must concede a legitimate sphere of interests to the other side. Demands that threaten either side's basic interests are thus unavoidably excluded. Further, this form of "mutual dependency" of union and employer produces a "common interest in the survival of the whole of which they are a part" (Fox 1966, p. 4). So, even union leaders who sympathize with "socialist objectives [are] forced to agree," as S. Martin Lipset puts it, "that a long-term contract and continued stimulation of antagonistic attitudes toward large-scale capitalism [are] incompatible" (1960, p. 361). Indeed, as unions "evolve" or "age," they tend to slough off "superfluous political ideologies" (Lipset 1960, p. 392) and don the "mature" integument of "business unionism" (see also Kornhauser, Dubin, and Ross 1954, pp. 507–10; and Lester 1958, esp. pp. 21–34, 120, 142).

"The *contractual logic itself*," historian David Brody argues (1980, p. 201; italics added), makes it "into a pervasive method of containing shop-floor activism." By displacing "class struggle" from the "shop floor" and reconstituting it in "a framework of negotiation," in Burawoy's formulation, collective bargaining results in "*an institutionalized creation of a common interest* between the representatives of capital and labor." It is "a form of class struggle [that] revolves around marginal changes which have no effect on the essential nature of the capital-labor relationship" (Burawoy 1979, pp. 114–15; italics in original). Thus, "the modern labor agreement is the principal instrument of class collaboration between the trade unions and corporations" (Aronowitz 1973, p. 218) and must, therefore, normally serve "to strengthen, rather than weaken, capitalist relations of production" (Clarke 1978, p. 18).

Anything that retrospectively appears compatible with the development of capitalism is thus explained as a fulfillment of its reproductive needs. This compels even its radical or Marxian adherents to ignore the

effects of real class struggles, since they are already known, in shaping the realm of labor's immediate subservience to capital.

So, unions are seen as a mere "passive reflection" of the organization of production, necessarily taking on "the *natural* hue of the closed, capital-dominated environment of the factory itself. . . . No matter whether the trade union movement in question adopts a 'revolutionary' or 'reformist' stance, it tends to encounter the same *structural limits* to its action" (Anderson 1967, pp. 264–65; italics in original). "It is not possible [for radical unionists] to transcend the institutional constraints of trade unionism itself" (Aronowitz 1973, pp. 21, 219). Rather, as Michael Mann puts it, since "the framework of a capitalist market is implicitly accepted by the very activity of compromise economic bargaining . . . the practical relations with management entered into by Communist unions may be indistinguishable from those of reformist unions" (1973, p. 22, also p. 37).

Given the premise of predetermined structural "limits" and institutional "constraints" necessarily corresponding to the system's imperatives, it follows that "no matter whether" organized labor makes any self-conscious efforts to probe or test them, the result, a null effect, is also preordained. This sort of theory excludes the possibility that unions, given the political commitment, might be able to bend or stretch, if not break through, the limits or constraints it posits. It must deny that the union's political objectives, strategy, and actual practices really matter in *shaping* the plant's "capital-dominated environment."

But these, of course, are precisely the critical substantive issues. For, even if unions can "never become fully anti-capitalist organizations" (Hyman 1985, p. 123), the possibility remains that under the appropriate political leadership—especially one committed to "socialist objectives"—they can inscribe "anticapitalist" tendencies into the political regime of production in their domain.⁶ How far such encroachments on capital can go, "beyond which the mechanisms of private capital accumulation are threatened, and disinvestment occurs, unleashing another kind of class struggle, of an extra-production character" (Anderson 1990), can be discovered only in practice, by probing and testing the theoretical limits.

Thus, it is our premise here that, in Antonio Gramsci's words, "a trade union is not a predetermined phenomenon. It *becomes* a determinate institution, i.e., it takes on a definite historical form, to the extent that the strength and will of the workers who are its members impress a policy

⁶ Stephens and Stephens (1982), who locate themselves within "social democratic Marxism," similarly argue that the "ideology and action of working-class leaders" affect both the enactment and implementation of *legislation* on "workers' control."

and propose an aim that define it" (quoted in Hyman 1985, p. 118; italics in original). We argue here, then, that the "definite historical form" of the political regime of production is determined politically. Rather than a protean expression of systemic functions, the generic production regime is an artifact—within specific historical circumstances and (unknown) objective limits—of both class *and* intraclass struggles. Thus, variations in the production regimes in which different unions are implicated are determined in part by the distinctive political consciousness, or ideology ("reformist" or "revolutionary"), that guides and is embodied in the political strategy and actual practices of their leaders.

HISTORIOGRAPHY

But before turning to our empirical analysis of whether the union can impress a policy on collective bargaining, we should review what the historical and related specialized literature on U.S. labor has to say on the question. For although the theoretical and historical questions are inseparable, the writings addressing them often seem to exist on different planes of discourse.⁷ Historians and other labor specialists in several disciplines, as well as journalists, have made claims about the effects of Communist union leadership in the CIO, but until recently studies of the actual achievements of a Communist-led CIO union during the era have been rare, and only a few have dealt in any detail with their collective bargaining gains (see, e.g., Dix 1967; Filipelli 1970; Gilpin 1988; Huntley 1977; Jensen 1954; Keeran 1980; Kimeldorf 1988; McColloch 1988; O'Brien 1968; Ozanne 1954, 1967; Prickett 1975; Schatz 1983).

The prevailing historical claim, in labor economist Jack Barbash's words, is that the "contracts negotiated by an established, Communist-dominated union are indistinguishable from any other contract negotiated by any other union" (1956, p. 350). Here, for instance, are a couple of representative statements by distinguished historians: "It is remarkable," writes David Brody, "how little difference [radicals] made on the direction of the . . . unions they controlled" (1980, p. 132). "All indications," Harvey Levenstein suggests, "point to the fact that the politics of neither group [Communists and anti-Communists] played any major role at the bargaining table" (1981, p. 334).⁸

⁷ Prickett's work on the CIO (1975, p. 443) is a rare exception. He specifically rejects the "contention that the institutional demands of the trade union make the politics of its leadership irrelevant."

⁸ Similar explicit or implicit claims that the politics of union leaders did not affect their union contracts, or that the Communist-led unions did not differ from other CIO unions in their actual trade union practice, appear in Aronowitz (1973, pp. 25, 342, 350); Bernstein (1971, p. 782); Caste (1978, p. 353); Cochran (1977, pp. 355, 379);

Some writers, however, implicitly reject the idea that the politics of union leaders are irrelevant to their union's achievements. On one side, this is stressed by those who charge that the Communist-led unions were subservient to an alien power and thus pursued policies that, as CIO officials charged, were subversive of sound trade union objectives. "The turns of U.S. Stalinists from leftward to rightward, and back again, have been determined," says C. Wright Mills (1948, p. 199), "not by their judgment of the changing needs of the working people, or by pressures from these people, but by the changing needs of the ruling group in Russia." "Communists in the labor movement," Walter Galenson asserts (1974, pp. 236, 242), "were committing a fraud. . . . The evidence [historians] have already gathered is overwhelming. . . . There is simply no doubt that in general the unions that remained in the CIO were far more responsive to the views of their members than the expelled [Communist-dominated] unions, and never sacrificed their economic interests at the behest of an alien power." ⁹

On the other side are barely a handful of historians who claim that the Communist-led unions were, in the words of Richard Boyer and Herbert M. Morais (1955, p. 361), "the pace-setters for the whole trade union movement by reason of wage scales and conditions won . . . and sound trade union practices. . . . [They] insisted on membership control in drawing up contracts, in declaring contracts, or in settling them." ¹⁰

A similar assessment, although with a sharply opposed valuation, was made in 1946 in a special report by the Research Institute of America (RIA) on how to "deal with . . . Communist-controlled unions." The report warned that "bargaining with a CP [Communist Party] union is a more tight-fisted affair than with any other union." It advised employers "dealing with a Communist-controlled union, or with a union in which Communists may win control, [to] give particular attention to clauses" dealing with the "management prerogative," "no-strike commitments,"

Draper (1985b, p. 45), Kampelman (1957, p. 254), Karsh and Garman (1961, p. 113), Lichtenstein (1980, p. 128); Oshinsky (1974, p. 125), Ozanne (1954, p. 215), Saposs (1959, pp. 184-85).

⁹ Similar claims that Communist-dominated unions generally betrayed their members appear in Boulding (1953, p. 103); Gates (1944); Goldberg (1964, p. 7), Lens (1949, pp. 228, 244-45), Stolberg (1939, p. 5). Barbash (1956, p. 324) charges that "Communist penetration of unions . . . along with racketeering [is] a form of union pathology." He thus puts himself, on different pages of the same book, on both sides of the issue of the effect of ideology on collective bargaining.

¹⁰ Also see Emspak (1972, pp. 366-67), Prickett (1975, p. 419). Even some of the Communists' most strident opponents, such as Monsignor Charles Owen Rice, a prominent leader of the Association of Catholic Trade Unionists, admitted that they led "some of the best unions in the United States" (cited in Prickett 1975, p. 329).

and the "grievance procedure." It was "especially important (though more difficult) to strengthen the management prerogative clauses," the report said.¹¹ It advised management to "insist on no-strike clauses" and to "keep committeemen to a minimum" and "limit [the] working time stewards may spend on grievances" (RIA 1946, pp. 14, 16).¹²

THE POLITICAL REGIME OF PRODUCTION

If the "whip of hunger," in Max Weber's metaphor (1961, p. 209), compels "free" workers to produce *something* for capital, it does *not* (pace Weber 1968, p. 1010) "guarantee" their "effort." That is, it does not guarantee how *much* they will produce. For this, the employment contract is indispensable. It is "an agreement," as Charles Halaby points out (1986, p. 635), "whereby the employer pays the worker a wage and the worker yields to the employer a bundle of authority rights with respect to his productive activities. . . . The employer's subordination of the worker is what distinguishes the true employment contract from a mere sales contract" (see also Klare 1977-78, p. 297; Korpi and Shalev 1980, p. 306). It gives the employer the legal right, having bought the workers' capacity to produce, to decide what they produce and how they produce it; and it thereby clothes with the color of law the "exploitative class relation [that is] part of the very mechanism of the productive process itself" under capitalism (Giddens 1982, p. 169). The employment contract thus codifies the crucial political terms of this "exploitative class relation."

In the CIO's heyday, many union activists made "little distinction," observed a management expert who interviewed them (Chamberlain 1948), "between the *political philosophy* underlying the *state* and *industry*. In both spheres they see the necessity of controlling authority in the interests of those who take the orders . . . [in the] firm conviction that *those in control must themselves be controlled*" (pp. 166-67; italics added). We shall show how and to what extent this "firm conviction" was actualized in the employment contracts won under the leadership of

¹¹ Similarly, Hill (secretary of Rustless Iron and Steel Corp.) and Hook (vice president of Allis-Chalmers Manufacturing Co.) also warned that "left-wing militant unions consider management rights as obstacles to be overcome in order that the unions may have more freedom of action" (1945, pp. 58-59, 60). Compare Selekman (1949, pp. 179-80).

¹² The chairman of the RIA's Board of Editors in 1946 was William J. Casey, who was destined to serve as President Reagan's CIA director. In an article in *Forbes* (1946), Casey repeats almost verbatim the RIA report's advice about Communist-led unions (1946, pp. 15, 31).

the CIO's rival factions and parties—and thereby inscribed in the political regimes of production in which they were involved.

Inherent in the political regime of production is a set of inseparable contradictory tendencies. On the one side, it embodies the workers' subordination in the enterprise to ensure the performance of their tasks in the division of labor (Giddens 1973, p. 205) and is aimed at extracting maximum profit from the labor expended in production. On the other, it embodies the effects of the workers' resistance to their subordination and their struggles to enhance their own autonomy or "negative freedom" (Hyman 1974, p. 245) and is aimed at minimizing their exploitation.

Three types of provisions are crucial in establishing these opposing pro-capital versus pro-labor tendencies. First are the "prerogatives of management," namely, "the areas in which [management] is independent to take action . . . and the areas in which it has to make a referral of an issue to the union before it can be initiated" (Dubin 1958, p. 151). Does the contract restrict or protect the "right to manage" by denying or guaranteeing "specific functions exclusive to management" (Chamberlain 1948, p. 144)? Second are "the actions that the union [can and] will take under a variety of conditions" (Dubin 1958, p. 151). Does the contract protect or restrict the workers' ability "to operate sanctions upon the conditions under which labor power" is utilized (Giddens 1982, p. 170)? What limits, specifically, are imposed on the workers' right to strike? Third are the "methods for handling disputes under the contract" (Dubin 1958, p. 151). Does the grievance procedure restrict or protect the employer's right to discipline the workers? How does it affect the workers' individual and collective right to oppose their employer's policies and procedures—and their ability to impose contrary practices that, in Sid Lens's words (1947, p. 716), become "in effect, . . . unwritten supplements to a contract"?

The issue of "management prerogatives" (or the so-called right to manage) has long been "at the storm center" of struggles over "the frontier of control" (Goodrich 1920, p. 61), for their definition touches all other provisions of the union-management contract that bear on the question of power (Harris 1982). This is stressed by both managerial spokesmen and radical critics alike. Thus, Mann suggests that "the employer will yield on economic bargaining more readily than he will on the sacred 'managerial prerogative'" (1973, p. 21). Similarly, an American Management Association publication declares that "the *struggle for power* must automatically be *focused* [on] the *management rights* clause" (McMahon 1969, pp. 266–67; italics added) because it is essential, as corporation executives Hill and Hook argue (1945, pp. 58–59), for "protecting [management's] freedom and authority."

In principle, radicals and socialists consider management rights neither inherent nor legitimate; on the contrary, these constitute a quasi-legal form of illegitimate class power. As an officer of the Communist-led Farm Equipment Workers (FE) bluntly told an interviewer, "The philosophy of our union was that management had no right to exist. Therefore our policy was to offer no quarter" (Ozanne 1967, p. 214). Offering no quarter to management, and ceding it no prerogatives, extends the principle of self-government to the economy, and thus challenges, in Anthony Giddens's words (1973, p. 206), "the broader 'political' subordination of the working class within the economic order."¹³

SOURCES AND METHODS

The contracts analyzed here were negotiated by locals of "international" unions affiliated with the CIO from 1937 until the CIO's merger with the AFL in 1955. (The union is "international" because it also has locals in U.S. territories and Canada.) The contradictory tendencies contained in a given political regime of production are measured by the set of contractual provisions in which the crucial political terms of the employment relation are formally codified over time. Union political leadership is measured by classifying each of the unions into one of the CIO's three rival "political camps."

Given our focus on the political effects of political leadership, we do not examine the origins—ideological, programmatic, or strategic—of the CIO's internal political divisions. A major source of contention, of course, was the historical significance of Stalinism and the Soviet state. Whatever "the courage and admirable personal qualities of individual" Communist unionists, including "even the most saintly" among them, they were linked politically (whether wittingly or not) with Stalin's regime of terror (Zieger 1984, p. 300). But whether this was the reason why "most labor leaders actively or passively [fought] Communists" is arguable, as even an anti-Communist young radical like Mills (1948) observed at the time. Although some surely fought them out of principled opposition to Stalinism, many simply wanted "to kill off troublesome factions within their unions" or to solve a problem in "public relations" (Mills 1948, pp. 190–91).

¹³ This same idea appears in the warning by Charles E. Wilson of General Motors (GM) right after World War II that labor's "attempt to press the boundary farther and farther into the area of managerial functions" threatened the "American system" with a social revolution "imported from east of the Rhine" (Brody 1980, p. 181).

The Political Camps among CIO Unions

Measuring the major independent variable in this analysis, that is, the union's political camp, is inherently controversial—especially the decision to classify a union as "Communist led." For not only the bosses but even union rivals used Red-baiting, or calling someone a Communist, as a weapon. Some AFL unions and even a few in the CIO formally barred Communists from office (Saposs 1959, p. 121; Taft 1953, p. 23). So, for Communists to conceal their party membership was not merely a Leninist reflex; it was often both a matter of principle ("Don't let Red-baiting break you up") and of practical political (and often physical) survival. Avowed Communists were thus rare among CIO unionists. Any classification of unions as Communist led (or "Communist dominated") thus involves something of a distortion (and construction) of political reality.

We have used Max Kampelman's classification ([1957] 1971, pp. 45–47) despite its tendentiousness; it is based mainly on the CIO's so-called trials of Communist-dominated unions and on other (anti-Communist) sources (e.g., Avery 1946; RIA 1946, pp. 17–18). Kampelman categorized unions mainly on the basis of the issues raised, causes advocated, and positions taken by their leaders. For the Communist camp, this amounted to the claim that they were "parroting the Soviet line"; rarely was any evidence offered to demonstrate actual Communist party membership (1957, pp. 121–40, 167–224). Nonetheless, the classification's merit is that it represents the common political understandings of many union activists at the time. It also accords with our own study of the historical record.

Among the stalwarts of the left-wing or Communist camp were the Mine, Mill and Smelter Workers (MM), the United Electrical, Radio, and Machine Workers (UE), and the International Longshoremen's and Warehousemen's Union (ILWU). Alone among Communist-led unions, the constitution of MM, heir to the radical Western Federation of Miners, was explicit in its socialist objectives.¹⁴ The preamble of its constitution (Mine, Mill and Smelter Workers 1947, p. 2) declared: "We hold that there is a class struggle in Society, . . . that the producer . . . is exploited of the wealth which he produces, . . . that the class struggle will continue until the producer is recognized as the sole master of his product, . . . [and] that the working class, and it alone, can and must achieve its own emancipation."

In the center were the "uncertain and shifting" unions (Kampelman 1957, pp. 45–47). Communists were at times very influential in the coali-

¹⁴ A cursory review of some of the publications of these unions, however, suggests that socialist conceptions were often implicit in their interpretation of union aims

tion holding power in the union or in the main opposition coalition. Among this camp's major unions were the United Automobile Workers (UAW), the United Packinghouse Workers, and the Oil Workers International Union. The UAW, the CIO's biggest union, had radicals of many stripes among all of its rival factions. Its officers were committed to "prepar[ing] the ground for the wider and richer economic democracy which our combined efforts will win for our children," but also affirmed that "the worker does not seek to usurp management's functions . . . through his Union [but] merely asks for his rights" (UAW 1947, pp. 1, 4).

The unions classified in the *anti*-Communist political camp were led by officials most of whom considered the Communists an illegitimate political force. The United Steelworkers of America (USWA), the Textile Workers Union, and the United Rubber Workers were among the most important unions in the anti-Communist camp. Officials of USWA, this camp's most powerful union, were influenced by Catholic labor doctrines emphasizing social harmony and the achievement of "Christian justice" through class collaboration (Levenstein 1981, pp. 111-13).

The Contradictory Tendencies

The pro-capital versus pro-labor tendencies of a specific political regime of production, as they are formally codified in the relevant provisions of a union's contracts, are measured here as follows.¹⁵

Management prerogatives.—A clause (or clauses) in which a union cedes the "right to manage" ordinarily stipulates that "management has the right to hire, the right to discharge for just cause, the right to discipline, the right to plan production, the right to change the process of production, etc." (California Institute of Technology, n.d., p. 21). So, a contract's enforcement of management prerogatives or rights is indicated by a clause explicitly ceding them to management; its absence leaves labor free to challenge and encroach on them.

The right to strike.—A "no-strike" provision prohibits strikes entirely or specifies the limited conditions under which they are permissible during the term of the contract. (Such a provision might prohibit strikes when the disputes involved are subject to settlement by the grievance machinery or arbitration; or when they are unauthorized by the international.) So, restrictions on the right to strike for the duration of the

¹⁵ Aronowitz (1973, p. 217) specifically cites three of these pro-capital contractual "obligations" as the principal means by which "the modern labor contract [under monopolistic capitalism] . . . provide[s] a stable, disciplined labor force to the employer."

contract are measured as a trichotomy: no prohibition, a conditional prohibition, or a total prohibition of strikes.

Contract term.—The practical effect of a no-strike clause in restricting the workers' ability to resist their employer or prevent them from enforcing their understanding of the contract depends to some extent on the term of the contract and on the provisions of the grievance procedure. The longer the contract's term, other things being equal, the longer the workers are prohibited from using the strike either conditionally or totally as a weapon of struggle; so, the longer the term, the more disabling is a strike prohibition, even a conditional one, of "rank-and-file power in the immediate production process" (Davis 1980, p. 43). If long-term agreements serve as "a management tool to stabilize production and labor costs," as Aronowitz suggests (1973, p. 252), "militant unionism has always fought for one-year contracts based on its view of contracts as *per se* a limitation on workers' power to deal effectively with problems on the job." So, we have also included a dichotomous measure of the length of the contract, that is, short-term (one year) versus long-term (18 months or more).¹⁶

Grievance procedure.—Aside from a no-strike clause or a long-term contract, a complex and lengthy grievance procedure also reduces the pressure on an employer to try to resolve contract disputes and grievances quickly (cf. Mills and Wellman 1987, p. 194). An employer's ability to discipline workers is enhanced by "a bureaucratic and hierarchical grievance procedure consisting of many steps during which the control over the grievance is systematically removed from the [hands of the workers on the] shop floor" (Aronowitz 1973, p. 217). Conversely, the workers gain from a grievance procedure that involves the union, through a steward or "committeeman," from the first step, when a worker first presents a grievance, and resolves the grievance speedily and "at the lowest levels" (i.e., within the workplace itself). Such a procedure makes it easier for the workers to enforce the terms of the contract and correct what they see as inequities and abuses (Lens 1947, pp. 716–17).

A provision that a union "rep" must be present at the first step immediately transforms it from an individual complaint into a collective demand backed by the union. This not only increases the chances of settling it favorably but also protects the workers from retaliation by management. Settling a grievance with the least delay is assured by limiting the

¹⁶ A union might be willing to accept a conditional or even total strike prohibition as a trade-off for a short-term contract. We include a trade-off variable below, in our logit model (table 5).

number of steps allowed to process it and by putting a time limit both on each step and on the entire procedure. In contrast, a procedure involving many steps both delays settling a grievance and cedes its settlement to higher union and management officials.¹⁷

So, to measure the pro-labor versus pro-capital tendencies embodied in a grievance procedure, each of these three variables is dichotomized, that is, whether or not a union rep must be present at the first step; the number of steps (1–3 vs. 4 or more); and whether or not every step has a time limit.¹⁸

The Sample

This analysis is based mainly on a California sample ($N = 236$) of local collective bargaining agreements from 1937 through 1955. There were 31 CIO international unions with locals in California during this period, and the sample contains the local contracts of 23 of them. The California sample is taken from a refined national sample ($N = 431$) that we constructed from an original batch ($N = 660$) of CIO agreements obtained

¹⁷ Of course, whether the provisions considered "pro-labor" in this analysis are "really" in the workers' interests is not merely a question of meaning and measurement but a philosophical one as well. But, precisely for that reason, they reflect what unionists in the CIO's rival political camps believed to be working-class interests and what was necessary to protect and advance them. Thus, such militant, but anti-Communist, CIO leaders as Philip Murray and Walter Reuther came to believe that labor-management cooperation or a partnership between union and management would best serve the interests of the working class. For this reason, Reuther and Murray probably would have agreed with the recent assessment of our pro-labor provisions by former Supreme Court Justice Arthur J. Goldberg—who had been general counsel for both the CIO (1948–55) and USWA (1948–61) before becoming President Kennedy's secretary of labor. In a letter (Goldberg 1990), the late justice argued that refusing to cede the management prerogative and retaining the right to strike during the contract are actually to the "detriment of workers in the enterprises." In this view, challenging "management prerogatives leads to anarchy in the plants", and preserving the right to strike during the life of a contract "necessarily leads to strikes about grievances which are better resolved through grievance procedures. Further, it also results in overzealous local union leaders who instead of pursuing grievances in an ordinary way go along with strikes. . . . The principal sufferers of such strikes are union members . . . [They] bear the burdens of such strikes and often are replaced during such strikes" (Goldberg 1990). This view contrasts starkly with that of the Communists and their allies: they advocated incessant struggle (as an FE pamphlet put it in 1955) against "exploitation . . . by applying [workers'] economic and political power 365 days a year" (quoted in Gilpin 1988, p. 18).

¹⁸ A more effective measure would be the actual time limit on the entire grievance procedure, but the relevant data are not available for enough of the California contracts for us to carry out a systematic analysis.

from the California Institute of Technology. The Appendix provides details on the construction of the national sample and on the representativeness of the California subsample.

The relationships shown here, as we have emphasized, are not only of theoretical relevance but also constitute simple historical facts about our recent past that bear on our understanding of the present. What our analysis shows about the prevailing theory of labor unions and reveals about the realm of possibilities, and what it discloses about America's recent past during the CIO era, are conceptually separable issues. But they are historically inseparable. They both bear on the historical meaning of the origins, course, and consequences of Communist leadership among America's workers.

Although a sample need not be representative for an analysis that explores theoretically relevant relationships, so long as its scope is appropriate and these relationships have not themselves been introduced into the data by selective sampling (see Zetterberg 1965, pp. 128-30), the representativeness of the sample is relevant if it is to be adequate descriptively or to provide a source of reliable historical data. This is why we based this analysis on the sample of contracts negotiated by local unions in California. The prestige of the California Institute of Technology in its own state and its easier access to California companies and unions probably enhanced the chances that these organizations would send the requested copies of their collective bargaining agreements to the Industrial Relations Center. We surmised that this probably would make the sample of California agreements fairly representative of all such agreements in California. Basing our analysis on agreements in California alone also tends to hold constant some of the objective conditions outside the workplace. (We found, however, that the same pattern of relationships obtains in the national as in the California sample.)

THE EFFECTS OF POLITICAL LEADERSHIP

What, then, are the effects of a union's political leadership on the political regime of production? How different were the provisions codifying the political terms of the immediate capital/labor relation (i.e., management prerogatives, the right to strike, the grievance procedure, and contract duration) in the contracts won by local unions in the CIO's contending political camps? Was the pattern of contractual provisions in these camps roughly the same? If the functionalist consensus, whether in its pluralist or Marxist variant, as well as the prevalent views of historians, were correct, then the answer to the last question (our null hypothesis) would be yes.

Findings

We find, however, that the contracts won by the rival camps differed sharply: those won by the locals of Communist-led unions were consistently more likely to be pro-labor on the entire set of provisions codifying the crucial political terms of the immediate capital/labor relation than those won by locals affiliated with internationals in the shifting and anti-Communist camps. The contracts of the shifting unions—several of which Communists and their allies substantially influenced—also were more likely to be pro-labor than those of the anti-Communist unions, although not consistently. But the vast *majority* of the contracts of the Communist-led unions were pro-labor on *each* of these provisions (table 1).

If, for the moment, we disregard what each provision specifies and just count how many provisions were pro-labor, the results are dramatic. One-fifth of the local contracts of the Communist unions were pro-labor on all six provisions and thus actualized the "ideal type" of the anticapitalist political regime of production; but none of the contracts of the unions in the other camps were pro-labor on all six provisions. Further, half of the contracts won by the Communist-led unions, but only 3% and 2%, respectively, of those in the shifting and anti-Communist camps, had at least five pro-labor provisions (table 2).

The local contracts in our sample are not evenly distributed among a camp's various international unions; so, to check the possibility that our findings might be distorted by the overrepresentation of the local contracts of one or another international, we sorted and examined the local contracts by international. For every international having at least five local contracts in the sample, we calculated the percentage of these contracts that were pro-labor on the set of crucial provisions. Although this gave us only a handful of unions in each political camp to compare on each provision, the relationships are sharp, clear, and in the same direction as the relationships already shown. On all of the provisions, the average percentages of pro-labor local contracts were much higher for the Communist-led internationals than for those in the other political camps combined. On the management prerogative, the mean percentage pro-labor was 72% for the six Communist-led unions and 44% for the six non-Communist unions; on the strike prohibition, the pro-labor means were, respectively, 52% ($N = 6$) versus 24% ($N = 6$); on the contract term, 84% ($N = 6$) versus 62% ($N = 4$), and on the components of the grievance procedure: steward, 76% ($N = 5$) versus 27% ($N = 5$); number of steps, 75% ($N = 6$) versus 61% ($N = 6$); and time limits, 60% ($N = 5$) versus 45% ($N = 5$).

TABLE 1
PROVISIONS IN CIO LOCAL UNION CONTRACTS IN CALIFORNIA, 1938-55, CODIFYING PRO-LABOR TENDENCIES OF THE POLITICAL REGIME
OF PRODUCTION, BY CIO POLITICAL CAMP (%)

POLITICAL CAMP	MANAGEMENT PREROGATIVE	STRIKE PROHIBITION ^a			CONTRACT TERM	GRIEVANCE PROCEDURE		
		None	Conditional	Total		Steward	Steps	Time
Communist	. . . . .	25	40	35 (91)	83 (81)	79 (70)	84 (91)	65 (69)
Shifting	. . . . .	10	24	65 (78)	74 (65)	32 (62)	64 (78)	43 (54)
Anti-Communist	. . . . .	13	16	70 (67)	54 (50)	34 (59)	67 (67)	46 (54)
Log odds ratio (uniform association)....	.80**		46**		70**	99**	44**	40**
Standard error	18		12		21	.20	18	.18

NOTE.—Numbers in parentheses are *N*'s. Pro-labor provisions are defined as follows: management prerogatives, no clause, strike prohibition, either a conditional prohibition or none, contract term, one year or less, grievance procedure. (1) steward, (2) steps, 1-3, and (3) time limits, each step has a time limit

^a Dichotomized for log odds ratio, no prohibition and conditional prohibition vs total prohibition

** $P < .01$

TABLE 2
PRO-LABOR PROVISIONS IN CIO LOCAL UNION CONTRACTS IN CALIFORNIA,
1938-55 (%)

POLITICAL CAMP	NUMBER OF PROVISIONS						
	0	1	2	3	4	5	6
Communist (<i>N</i> = 51)	0	0	10	20	22	29	20
Shifting (<i>N</i> = 37)	0	11	27	30	30	3	0
Anti-Communist (<i>N</i> = 46)	4	17	33	17	26	2	0

NOTE.—See the notes to table 1 for the definitions of each pro-labor provision. Data on contract duration are missing for the prewar contracts. To retain these prewar contracts in the sample so that the findings on the other provisions would not be lost, we coded all prewar contracts as if they were short-term.

"OBJECTIVE CONDITIONS"

We abstract here from the sorts of "objective conditions," or "structural factors," that are usually the focus of sociological explanations of workers' behavior or "labor relations"; that is, we assume that they remain constant in order to explore the relatively independent effects of the political consciousness of union leaders in determining the political terms of the immediate capital/labor relation. No doubt such structural factors affect immediate capital/labor struggles and the types of unions and parties that emerge and gain adherents among workers. But they do not determine the objectives, strategy, or tactics of the unions and companies confronting each other in the class struggle in production or who wins and who loses. Nonetheless, we want to briefly consider the possible relevance of several structural factors for our analysis.

Industrial Structure

The CIO international unions whose local contracts we analyze here were involved in industries that differed in their productive organization and relative economic centrality. So it is certainly possible that such differences might have influenced what types of provisions these unions and their locals tried to win as well as what type they could win. But, in reality, the rival political camps were quite diverse in their internal industrial composition and, therefore, not essentially dissimilar in the relative heterogeneity of their forms of productive organization and technology, levels of concentration, sensitivity to economic fluctuations, and so forth. None of the camps appears to be in any way distinctive in these terms. So, it is doubtful that such structural variables can account for the pat-

tern of deep differences between the camps' characteristic political regimes of production.

Further, we did try to assess the independent effects of some of the objective economic conditions of the industries the unions organized and of some of the demographic characteristics of the workers in these industries on the unions' political alignments. Overall, we found no theoretically relevant bivariate relationship between any independent variable and the union's political camp, so it is improbable that any of these structural variables could have accounted for the pattern of the contracts won by the unions in the rival camps.¹⁹

Two recently completed studies by historians whose focus is also the "intersection" between "union ideology and functioning" (McColloch 1988, p. 2; Gilpin 1988) fully support our reasoning and evidence. They both compare the activities of two rival unions—one led by Communists, and their allies, the other led by non-Communists—that were not only in the same industry but, indeed, represented workers in different shops of the same company. What emerges in these studies is a pattern of sharp contrasts between the rival unions consistent with that revealed here. They find that the Communist-led unions made demands for better working conditions and won pro-labor provisions in their contracts that their rivals neither demanded nor won: this was the pattern when the Communist-led FE and the UAW "went at each other" at International Harvester during the same period examined here (Gilpin 1988, p. 1); and the same was true of the intense rivalry at Westinghouse throughout the 1950s between the independent UE, which was expelled from the CIO in 1949, and the CIO's anti-Communist International Union of Electrical Workers (IUE), which was chartered in 1949 by the CIO executive board to raid and destroy the UE (McColloch 1988). Similar conclusions emerge in a recent sociological analysis comparing the records of the country's two longshoremen's unions, based in the same industry and confronting many of the same shipping lines, from the 1920s until the early Cold War years: the Red-led ILWU on the West Coast and the "conservative and racket-ridden" East Coast International Longshoremen's Association (Kimeldorf 1988).

¹⁹ The question remains whether variations in the objective economic conditions in an industry or its internal social composition interacted with the political consciousness of union leaders in shaping the political regimes of production in which their unions were involved. It is not possible to measure such interaction effects correctly with the available crude indicators of the varying industrial situations actually encountered by the unions (see Stepan-Norris and Zeitlin 1989, p. 508, and app. 1 and app. 3, pp. 519–21).

Union Structure and Situation

The CIO's 38 durable international unions varied considerably in size of membership, the number of workers their contracts covered, and competition from other unions in the same industry. These aspects of their organization and competitive situation also might somehow have entered into what the workers and their leaders thought was possible or realistic and could, therefore, have affected both the union's formulation of its demands and the actual odds of winning them in collective bargaining. So, as a rough means of controlling for such differences, we also analyzed both the local and national agreements won by the CIO's top three unions, the so-called Big Three: UAW, USWA, and UE.²⁰

The UE was known as the "Red fortress" in the CIO, and its leadership was supported by a broad base of Communists and other radicals spread among its highly independent locals and powerful districts. Its collective bargaining strategy and specific demands "came up from the locals through the various industry conference boards, not down from the top" (Filipelli 1984, pp. 240-41; see also Matles and Higgins 1974).

In the UAW, the Communists and their allies formed a "left-center" coalition, which was one of the most important factions that vied for the union's leadership over the years. They also led some important locals (including Local 600, "the world's biggest local," at Ford's River Rouge plant in Dearborn, Michigan). Walter Reuther was elected UAW president in late 1946; after his faction won a majority of the executive board at the November 1947 UAW convention, they purged the Communists from the union.²¹

The USWA was organized by the CIO's Steel Workers Organizing Committee (SWOC), whose organizers—many of them Communists—were all hired, paid, and fired by John L. Lewis, Philip Murray, and other SWOC officials. After they organized a local, SWOC sent

²⁰ In 1944, their official memberships were as follows: UAW, 1 million; USWA, 800,000; UE, 500,000; together, at that time, they constituted 46% of the membership of the CIO's 38 affiliated international unions (calculated from Huberman [1946, pp. 161-80]). As of October 1949, both the UAW and USWA "hovered close to the one million member mark," and UE had some 650,000 members (Levenstein 1981, pp. 205-6). Until 1942, when John L. Lewis took the United Mine Workers (UMW) out of the CIO to protest its subservience to President Roosevelt, the UMW ranked third in the CIO. (In 1944, the UMW had 600,000 members.)

²¹ The locals and districts of the UE and UAW varied considerably in the extent of Communist or anti-Communist influence. This suggests that any future attempt to assess the effects of union political leadership in collective bargaining should also try to take into account the actual political complexion of the locals themselves, to do so, primary historical research will be necessary.

them elsewhere (Taft 1964, p. 57). Although Communists led some of the union's toughest organizing battles, they were not able to gain and hold local leadership because when they "were spotted, or became too dangerous a threat, they were discharged" (Saposs 1959, p. 122). The SWOC was not disbanded, and the union itself was not officially established until 1942. So, USWA was to endure as a bastion of the CIO's anti-Communist camp.

The pattern in the local contracts of the Big Three was about the same as that for the political camps to which they belonged. The UE's local contracts were by far the most consistently pro-labor on the set of crucial provisions, followed by the UAW, with the USWA a distant third (table 3).

What about the Big Three's national contracts (i.e., the contracts the internationals' own executive offices negotiated)? Did they exhibit the same pattern? To answer this question we examined all of the national agreements made (from the earliest in 1937 or 1938 through 1950) between each of the Big Three's unions and the major employer in its industry: the UE and General Electric (GE), the UAW and GM, and the Steelworkers (SWOC, later USWA) and Carnegie-Illinois (which became U.S. Steel [USS] in late 1950).²²

Not one of the UE/GE national contracts—before, during, or after World War II—ceded management rights or prerogatives (General Electric 1938–50). But the UAW/GM and USWA/USS national contracts all did (General Motors Corporation 1937–50; United States Steel Company 1937–50). That the UE refused to cede management prerogatives in the postwar years is especially significant, for, from late 1945 on, higher corporate executives and organized big business were demanding that "unions . . . recognize, and not encroach upon, the functions and responsibilities of management" (U.S. Department of Labor 1946, pp. 56–57). Management resolutely resisted any form of "joint [union-management] control of matters beyond wages and working conditions," as Sanford Jacoby (1981, p. 26) emphasizes, and, after the war, "the unions accepted the terms set by management."²³

²² For each union and company, by year, our analysis covers the following national agreements. For UE/GE, we cover agreements made in 1938 (actually in force until 1941), 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948 (in force until 1950), and 1950. For UAW/GM, we cover 1937, 1938 (in force until 1940), 1940, 1941, 1942 (in force until 1945), 1945, 1946 (in force until 1948), 1948 (in force until 1950), and 1950. For SWOC/Carnegie-Illinois (referred to here as USS), we cover 1937 (amended in 1938, it remained in force until 1941) and 1941, and, for USWA/USS, 1942 (in force until 1945), 1945 (in force until 1947), and 1947 (amended in 1948, 1949, and 1950).

²³ The most dramatic expression of the corporations' immediate postwar reassertion of the so-called right to manage came in the UAW/GM 113-day strike, begun on November 21, 1945, which involved some 300,000 workers nationwide. GM won the

But, as we know, the UE did not accept the terms set by management. Its postwar agreements with GE did not cede management prerogatives—not even in 1950 after its expulsion from the CIO and while it was under relentless siege by government agencies and raids by other unions.²⁴

The national agreements of UE/GE had only a minor condition on the right to strike; before striking, a local was to try to resolve the dispute or grievance through the established grievance procedure.²⁵ They were all short-term (one-year) agreements, except that of 1948 (which was for two years). In the grievance procedure, workers, stewards, and the local union retained initiative, and it involved the fewest and least cumbersome steps and the shortest time limits of the Big Three contracts.²⁶

strike, after absolutely refusing to bargain over issues (e.g., pricing) that it saw as encroachments on the "sovereign power of corporate management" (Harris 1982, pp 139–43, Cochran 1977, pp 251–52)

²⁴ The 1950 UE/GE contract was signed in September 1950. From April to June 1950, while winning 40 of 90 NLRB elections (under conditions imposed to favor the rival IUE, which the CIO set up in the UE's jurisdiction) at GE, Westinghouse, and other corporations dominant in the electrical industry, the UE lost about half of its pre-November 1949 members, most of them to the IUE, some to other raiders, such as the Machinists Union. A month before the UE/GE 1950 agreement, five of the UE's top officers were cited for contempt of Congress for refusing to cooperate with the House Un-American Activities Committee on the grounds of the Fifth and First Amendments (Levenstein 1981, pp 310–11).

²⁵ Derber (1945, p 753) mistakenly reports that the 1938 UE/GE contract forbade "sit downs, stoppages and lockouts . . . during the life of the agreement." In fact, it had only the same conditional prohibition that later contracts had, namely, if a dispute could not be solved between the local and its particular plant management, the local had the option, before exercising its right to strike, of taking it to higher levels of the union if it wished "such cases may be referred to the National Officers of the Union and an Executive Officer of the Company who shall arrange a conference (if necessary) with representatives of the Local union" (see, e.g., GE 1941, p. 10; 1948, p. 41; italics added). This was also true of the wartime UE/GE national contracts (e.g., 1942, p. 11, 1944, p. 25). We examine "period effects" below.

²⁶ The 1950 UE/GE contract actually strengthened the grievance procedure by providing that the steward had to be involved throughout three designated phases of "step one." The stewards for the UE were elected by the workers in the shop or small department and, unlike the committeemen of the UAW and USWA, were not paid by the company (until 1950, when part of their time was company paid). The ratio of shop stewards to workers in the UE, which always stressed that rank-and-file workers should decide for themselves how to handle grievances, was also generally much higher than the ratio of committeemen to workers in UAW and USWA (Matles and Higgins 1974; Matles 1965). Aronowitz (1973, p 254; italics added) reports that "the rank-and-file steward was replaced by the [company-paid] 'committeeman' in the United Auto Workers agreement with the 'Big Three' manufacturers of the industry in 1946." This date for the introduction of the paid committeeman is incorrect. The 1938 UAW/GM contract already specified that committeemen would be paid their regular wages by the company (for up to two hours daily) while they handled grievances (1938, p. 3). The 1946 contract increased the number of paid hours permissible,

The UAW/GM agreements ceded management prerogatives, stipulating that the corporation had the "sole and exclusive responsibility" to decide what and how to produce. They restricted the right to strike by requiring that no strike be called before a lengthy and complex grievance procedure was exhausted (this included recourse to an impartial umpire whose decisions were final); all stoppages, slowdowns, or strikes also had to be authorized by the international. Until 1946, UAW/GM contracts were for a one-year term or stayed in force indefinitely until revoked, on 60 days' written notice, by either the union or company. The 1946 and 1948 contracts were for two years and also contained the 60-day notice provisions. In 1950, UAW signed the first of its long-term contracts, a five-year agreement with GM, which some say "signaled the end of an era in industrial unionism" (Aronowitz 1973, p. 247).²⁷ The UAW/GM grievance procedure typically had four complex steps, with specific time limits. At the worker's request, the committeeman handled the first step of the grievance.

The SWOC/USS and USWA/USS national agreements all ceded management prerogatives, stipulating that the company had the "exclusive rights to manage the business and plants and to direct the working forces." They all had definite no-strike clauses, which prohibited strikes and stoppages during the life of the contract. Disputes were to be settled by "earnest efforts" by both the union and the company, through the grievance procedure. The end of this procedure was compulsory arbitration unless both parties agreed to forgo it. The earliest national agreement in 1937 left an aggrieved worker on his own to settle the grievance with the foreman, but subsequent agreements specified that the steward (or "assistant committeeman") could be present at the first step of the grievance procedure at the worker's request. The grievance procedure had three steps in the 1943 agreement but later had four or five complex steps, with specified time limits.

So, in sum, our clause-by-clause examination of the local and national contracts won by the three biggest international unions reveals the same

averaged over the week, to five per day (1946, p. 14), and this was the standard in subsequent contracts through 1950 (e.g., 1950, p. 18).

²⁷ The 1950 UAW/GM contract was hailed at that time by the editors of *Fortune* magazine as "The Treaty of Detroit" (Lichtenstein 1982, p. 242) and "the biggest labor event . . . of the post-World War II period," because it "threw overboard . . . all theories of profit as 'surplus value' " (*Fortune* 1951, p. 94). This contract, because of the economic centrality of the auto industry, had major pattern-setting implications. But, it should be noted, Harry Bridges's ILWU had signed a seven-year contract with West Coast employers two years earlier, in 1948; part of ILWU's rationale was that the contract would protect the longshoremen's jobs against impending mechanization (Levenstein 1981, p. 334).

TABLE 3

PROVISIONS IN BIG THREE CIO LOCAL UNION CONTRACTS IN CALIFORNIA, 1938-55 (%)

BIG THREE UNION	MANAGEMENT PREROGATIVE	STRIKE PROHIBITION*			CONTRACT TERM	GRIEVANCE PROCEDURE				
		None	Conditional	Total		Steward	Steps	Time		
UE	44 (32)	25	69	6 (32)	93 (31)	93 (27)	87 (32)	79 (28)
UAW	29 (34)	15	32	53 (34)	78 (27)	48 (31)	68 (34)	32 (25)
USWA	7 (44)	16	16	68 (44)	55 (31)	25 (40)	66 (44)	44 (36)
Log odds ratio (uniform association)			1.08**		67**		1.19**	1.61**	.55*	.67**
Standard error...			31		.18		36	33	28	27

NOTE.—Numbers in parentheses are N's

* Dichotomized for log odds ratio, no prohibition and conditional prohibition vs total prohibition

* $P < .05$ ** $P < .01$

pattern found in the local contracts of the rival camps as a whole: the UE/GE agreements were definitely pro-labor.²⁸ The UAW/GM agreements were much less so, and the USWA/USS were the least by far.

The process of formation of the CIO's 38 durable internationals differed considerably. In turn, these variations in how the unions were formed "loaded the historical dice" in favor of the Communists' or their rivals' winning power in the new CIO unions. Specifically, the following "insurgent political practices" enhanced the Communists' chances of winning union leadership: (1) secession of the union from the AFL from below through the insurgency of its workers (rather than from above, through the revolt of its top officers); (2) independent organization of the union (rather than organization by a CIO "organizing committee"); (3) formation of the union through amalgamation (rather than as a unitary organization); and (4) earlier penetration of the industry by "Red union" organizing (Stepan-Norris and Zeitlin 1989).

Did the organization of a union through any of these insurgent political practices have independent effects on the objectives and achievements of the union in collective bargaining? That is, if insurgency continued to characterize the political practice of the leaders of a union, whatever political camp it was in, this would also have been expressed in fighting for and winning "pro-labor" provisions in its collective bargaining agreements. This is a complex empirical question that we shall take up in detail elsewhere. What is immediately relevant to report here, however, is that, when the presence or absence of insurgent political practices in the organization of the union are held constant, the Communist-led unions were still far more likely than their rivals to win pro-labor provisions in their contracts.

Trade-offs

The question remains: Would an analysis focusing on other contract issues and provisions, for instance, on the differences in the actual wages and benefits won, disclose a similar pattern of variation among the unions in the rival political camps? In particular, "some of the authors in the pluralist tradition . . . imply that [Communist-led or radical] ideological unions can obtain 'anti-management' measures, but only at the cost of their ability to achieve gains in [other] areas, like wages. Hence, they

²⁸ After the UE was expelled from the CIO, say Howe and Coser (1957, p. 46), the "Stalinists at [its] head . . . in order to maintain their contracts, were noticeably indulgent with management." We have found no evidence to substantiate this oft-repeated claim.

serve their members less well than conventional unions . . . [because of their] trade-off between wage gains and militancy on control issues."²⁹

The effect of unions on wage levels—a much-debated issue—is beyond the purview of this article. But we want to point out in this connection that, contrary to the claims of some critics (Epstein and Goldfinger 1950, p. 42; Youstler 1956, p. 266; Preis 1972, p. 397), we have found no evidence to support the charge that the UE was less effective than other major unions in "delivering the goods." For instance, in two of the three immediate post-World War II bargaining rounds, the wage raises won by each Big Three union from the industry's largest company were identical: the UE/GE, UAW/GM, and USWA/USS contracts specified raises in early 1946 of 18.5¢ an hour; in 1947, the raises amounted to 15¢ an hour. But in the third round, in 1948, the UAW led with 14¢, the USWA was next with 13¢, and the UE third with 12¢ (Soffer 1959, p. 59, citing Bureau of Labor Statistics data).

On other "bread and butter" issues, the available evidence also contradicts the idea that the Communist-led unions abandoned the workers' immediate interests for mere anticapitalist rhetoric. Again, the two recent historical studies comparing rival unions in the same industry and company during the same period (Gilpin 1988; McColloch 1988) found no evidence to support this view. The FE consistently fought the "speed up" and similar methods of "lowering costs" and raising "productivity." The FE saw these, as it warned its workers in 1955, as methods of actually increasing the workers' exploitation. They were a "means [of] widening the spread between what a worker gets paid for his labor and the profit that the company makes on his labor" (FE 1955, quoted in Gilpin [1988, p. 19]).³⁰

In his analysis of the records of the UE and the IUE on incentive pay and seniority provisions and practices at Westinghouse in the 1950s, Mark McColloch (1988, pp. 28–29) also found a "clear difference" both in how these unions approached these questions and in the working conditions that resulted. "On both incentive and seniority the UE . . . consistently resisted take-aways and usually succeeded. . . . Measured day work and camera time studies were just two of the Westinghouse-sought innovations which the UE was able to block, while they were being imposed on thousands of IUE members. . . . [UE] firmly and

²⁹ This quote is from an anonymous *AJS* reviewer.

³⁰ The Congress's Joint Labor-Management Relations Committee also "tended to agree," Gilpin observes (1988, p. 47, n. 68), "at least in 1948, that the FE established the standards for contracts in the agricultural implements industry."

consistently resisted . . . any watering down of the applicability of seniority" and also fought, in particular, for equal seniority rights for women.

The Shop Floor

Our empirical analysis focuses on the provisions of "the document that most shapes the daily life of the . . . worker—the contract" (Gilpin 1988, p. 2). But a crucial question is how closely "the contract reflects the character of actual industrial relations" (Aronowitz 1989) and thus whether the "contract language gives a very limited window into the actual role of unions [in] . . . class struggle" (Brecher 1990). What, put theoretically, is the relationship between the juridical and the practical reconstruction of the immediate capital/labor relation? How the contract shapes the workers' daily lives depends on what the union makes of it in practice—whether acting "as night watchman over the collective agreement" to "circumscribe the terrain of struggle" (Burawoy 1983, pp. 594–95), or engaging in constant "extra-contractual shop floor activity" and wielding the contract "in the workers' defense, employing it when it [is] useful, abandoning it when [it] is not" (Gilpin 1988, pp. 14, 25, see also Mills and Wellman 1987).

The information available about the entire realm of union activity on the job, based on the observations of shop-floor relations provided by three ethnographic studies as well as by several historical studies, is consistent with the contractual pattern disclosed here.

We now know that the USWA's national and local agreements, compared with those of the UE and the UAW, were, by far, the most pro-capital. Yet, it was on the basis of Burawoy's work as a machine operator in a piecework machine shop in a USWA local that he elaborated his variant of the theory of labor unionism's irremediably pro-capitalist functions (1979). He also drew extensively on Donald Roy's (1952) reports on shop-floor relations in the same factory 30 years earlier.

Although their studies were separated by so many years, Burawoy found that Roy's observations and his own coincided on the role of the union in the shop and on the workers' attitudes toward it. For instance, he quotes Roy's report (Roy 1952, p. 434) that "the union was rarely a topic of . . . conversation [in the shop], and when it was mentioned, remarks indicated that it was not an organization high in worker esteem. Characteristic of machine operator attitude toward the union was the scornful comment: 'All the union is good for is to get that \$1.00 a month out of you.' " Roy said that he had little contact with the shop steward. "In his eleven months at Geer," Burawoy reports, "Roy interacted with [the steward] only twice. [First, when] the steward wanted him to sign the checkoff form" and second, when Roy complained to him about his

piecework payment rate. "The steward showed interest but did nothing." These "attitudes among rank and file," Burawoy says (1979, pp. 111–12), "remain much as they were in 1945. There is a pervasive cynicism as to the willingness and ability of union officials to protect the interests of the membership."

Given the close fit between Burawoy's and Roy's observations on the union's role and the men's views about it, it is crucial that the observations by another member of Roy's own three-man research team working elsewhere at about the same time were quite different from Roy's (and Burawoy's). While Roy was working in his shop, Orvis Collins was also working as a milling machine operator, in a shop employing 90–110 machine operators, in another factory (Roy's shop employed some 50 men). Collins worked there for about six months, and he also spent many months afterward interviewing the men he had worked with in his shop (Collins, Dalton, and Roy 1945).³¹

But the union steward in Collins's shop—unlike the nearly invisible one Roy reported in his shop—was highly visible, active, and respected. He was the leader of a lunch group of about 40 workers who "were CIO." Another lunch group consisted of about 15–20 "AFL men," dominated by several who wanted the AFL to replace the CIO in the plant (Collins et al. 1945, p. 8). Collins did not find depoliticization and "pervasive cynicism" about the union's defense of their interests; rather, he found that "union sentiment was strong" in his shop. He also found (unlike Roy's observation that the union—let alone "politics"—was rarely a topic of conversation in his shop) that the workers often had "heated arguments" about political issues, with the lines drawn between the pro-union majority and a few anti-union workers. "These arguments," Collins reports (1945, p. 10), "were usually political in nature, and on such subjects as whether Russia had any part in winning the war, whether Roosevelt had planned to become a dictator, or whether the workmen had 'the right' to strike."

Collins refers to a typical discussion in which one worker, called "Swede," defends the union against the charge by another worker, called "John," that the union is "all right if you like racketeers." Swede responds that "without a union the boss tells you where you're going to work and if you don't like it you don't open your mouth." It was significant that Swede had begun the discussion "feeling John out by saying that he hoped [Henry] Wallace would become Secretary of Commerce" (Collins et al. 1945).³²

³¹ This article is not cited by Burawoy

³² Wallace, after being passed over for renomination as vice president in 1944, did, in fact, become President Truman's secretary of commerce in 1945, and in 1948, he

John: I suppose from that you like Wallace.

Swede: He and Roosevelt have both done a lot of good for the working man.

John: What do you mean he's done a lot of good for the working man? Killing pigs and closing banks. [P. 10]

These ethnographic studies of two different machine shops studied at the same time in the same way by two members of the same research team convey sharply opposed images of shop-floor relations and workers' consciousness. They suggest that the shop-floor relations in Burawoy's (and Roy's) shop were not the expression of unionism's inherently integrative and depoliticizing function, as he assumes, but rather were the product of the specific political practices of the shop's bureaucratic and accommodationist union, the USWA.

Moreover, Collins's observations on the local union's role in shop-floor relations are consistent with our own findings, they, too, reveal that the political consciousness of union leaders makes a significant difference in their political practice. The union in Collins's shop of active, politically alert and committed union men, as the reader may have guessed, was the CIO's "Red fortress," the UE.

Similarly, the two historical studies already mentioned, which compare rival unions in the same industry and company (Gilpin 1988; McColloch 1988), found sharp differences not only in the pro-labor provisions won in their contracts by the rival Communist-led and non-Communist unions but in their actual shop-floor practices. So, for instance, Toni Gilpin's research on the rival Communist-led FE and Walter Reuther's UAW at International Harvester in the late 1940s and early 1950s, where both unions represented about the same number of workers, shows that the UAW emphasized "stability in labor relations" while the FE actively engaged in "the politics of class conflict." Summing up their contrasting relationships with the company, Gilpin (1988) quotes a Harvester official as saying in 1952 that "compared with our relationship with FE-UE, our dealings with the UAW could only be called harmonious" (p. 17). In fact, of the 22 different unions the company dealt with at the time, it put FE in a separate category. The company accused FE stewards of roaming the plant not to deal with actual grievances but, in one official's words, "to promote unrest, stir up ill will, harass the company, and convince as many members as it can that labor relations with Harvester is and must be class warfare" (p. 28). Or, as another company official put it, FE's officers were "irresponsible radicals" who were "more inter-

was to be the presidential candidate of the newly formed Progressive party, in which Communists played a crucial role.

ested in disruption than in labor-management peace" (quoted in Gilpin 1988, p. 42).

FROM RED UNIONISM TO RED "COMPANY UNIONISM"?

During that evanescent era in America's recent history when Communists and their radical allies held power and trust in many CIO unions, the contracts won under their leadership were more likely than those won by their rivals to contain crucial pro-labor provisions. This was an era, however, of abrupt transitions and profound changes. In this era, there were four distinctive periods whose critical events deeply affected the immediate political agenda, and thus the strategy, tactics, and actual practices of the rival factions and parties vying for leadership within the organized working class. In particular, the "line" of the Communists went through acute turns (zigzags) and sudden reversals (flip-flops) during these years, as the CP sought to cope with sharp changes in the "current situation" both at home and abroad, while also not straying "too far for too long" from "the 'general line' . . . set in Moscow" (Draper 1985a, p. 37).

The question, then, is whether the particular pattern of union-management agreements in any of these periods differed substantially from the general pattern for the entire era. These periods were (1) the immediate pre-World War II years of the Great Depression, working-class insurgency, the rapid growth of industrial unions, and the New Deal, (2) World War II, the antifascist alliance, and state regulation of capital/labor relations, (3) the immediate postwar offensive of organized labor, coupled with the right-wing resurgence in Congress and passage of the Taft-Hartley Act in 1947, and (4) the advent of the Cold War, the establishment of the "national security state," and the heightened attacks on Communists, culminating in the purge of alleged Communist unionists or expulsion of Communist-led unions from the CIO.

In the pre-World War II years, as most serious observers agree, "Communist trade union leaders long [had been] among the most militant in the country" (Seidman 1953, p. 80), "they worked hard to build unions," as Mills puts it (1948, p. 23), "to fight in the class struggle against the bourgeoisie and its government." But once Nazi Germany attacked the Soviet Union, and for the war's duration, the CP officially subordinated the class struggle to national unity in the war effort. Committed to production without interruption, CP officials vehemently supported organized labor's no-strike pledge. This resulted, in the prevalent view, in the abandonment by the Communist-led unions of "a militant defense of labor's interests" for the duration of the war (Lichtenstein

1974, p. xvi; but cf. 1982, p. 144).³³ Typical is the claim that the Communist-led unions "moved so far to the right . . . in support of the war effort that the traditional left-right spectrum no longer accurately measured the real differences between factions of the CIO" (Davis 1980, p. 66). "In every union," columnists Joseph and Stuart Alsop summed up, "the communists became the great reactionaries" (1947*b*, p. 118; see also 1947*a*; Mills 1948, p. 23; Lens 1949, p. 345).

In the postwar years, after an interlude of militant unity among its rival factions, the CIO began to split apart over issues of both domestic and foreign politics. The Communist-led Left and their liberal opponents in the CIO differed over how to fight against resurgent reaction and new antilabor legislation.³⁴ They also disagreed, far more sharply, over whether to form a labor-backed third party and to oppose the Truman administration's emerging Cold War policy of Soviet "containment." The CIO's executive-board members wavered for some time over whether to endorse Truman's presidential candidacy or launch a third party. But in January 1948, they lopsidedly voted to endorse Truman and to oppose formation of a third party. The board enforced adherence to this policy throughout the CIO at all levels and purged anyone who opposed it.

After Truman's election and the dismal showing of Henry Wallace as the new Progressive party's candidate, CIO liberals launched an effective assault on the Communists. In late 1949, the CIO's executive board, now entirely shorn of Communists and their allies, voted to expel unions that were found to "consistently follow the Communist line." By mid-1950, 11 "miscreant unions . . . had been drummed out of the CIO" (Levenstein 1981, p. 306)³⁵

³³ The German invasion of the USSR ended the 22-month interlude of Soviet neutrality, begun with the Nazi-Soviet nonaggression pact, during which the U.S. Communists—with the slogan, "The Yanks are not coming!"—had been advocates of nonintervention in the war of defense against the Axis powers.

³⁴ Taft-Hartley required that union officers sign a "non-Communist affidavit" and allowed the employer to call for a bargaining election to try to decertify the union (i.e., deprive it of NLRB representation) if its officers refused to sign an affidavit (Roberts 1971). If they openly left the CP but did not renounce communism and then signed the affidavit, as some did, they were promptly put on trial for perjury.

³⁵ Although we have adopted the term "political camp" as a convenient label for the CIO's internal political alignments, these camps (including even the so-called well-disciplined Communist camp) were not organized or even cohesive. For instance, only four of the Communist-led unions (not including the UE) endorsed Wallace's 1948 presidential candidacy. At neither the 1948 nor the 1949 CIO conventions was there any evidence that the Communist-led unions, or even their three major ones, the UE, MM, and ILWU, agreed on a common stance against the onslaught of their enemies. Only the UE boycotted the 1949 convention, the others in their camp attended. Harry Bridges, who thought the UE's withdrawal ill-advised and vowed the ILWU would

The CIO's executive board was forced to resort to the trials and expulsions, as David Oshinsky (1974, p. 125) observes, "because the anti-Communist factions within the various left-wing affiliates were unable to dislodge the Communists from power. In only three . . . of the pro-Communist unions were the right-wingers successful in gaining control—an indication, perhaps, that despite their pro-Soviet, anti-Truman position, the Communists were still respected for their ability to run effective trade unions."³⁶

After their expulsion from the CIO, the Communist-led unions were continually subject to raids by other CIO unions and attacks by an array of government agencies and congressional committees. The latter held hearings on "Communist infiltration" throughout the country between 1950 and 1952, subpoenaing and interrogating "unfriendly" witnesses active in locals of the expelled unions. The coup de grace came in 1954 in the form of the Communist Control Act, which authorized the Subversive Activities Control Board to define a union as "Communist-infiltrated" and deprive it of the protection of the Wagner Act and representation before the NLRB (see Cauter 1978, chaps. 18–21).

What, then, were the effects of the events of these periods—immediate prewar, World War II, immediate postwar (through 1947), and later postwar years (1948–55)—on the relative chances that unions in the rival camps would win prolabor provisions in their contracts? Did World War II transform the Red unions, as has been charged (Aronowitz 1973, p. 305), into "Red company unions"? How effective were the Communist-led unions in the immediate postwar period, after the CP renounced

stay in the CIO until expelled, "wryly pointed this out to reporters 'This should torpedo all that crap about us forming a bloc and the organization of a third labor movement,' he said" (Levenstein 1981, pp. 281, 301–2).

³⁶ Actually, this was true of four unions: the National Maritime Union (NMU), Transport Workers Union (TWU), United Furniture Workers, and United Shoe Workers, and here it was mainly because men in the CP (like the TWU's Mike Quill) or close to it (like the NMU's Joe Curran) now broke with it and kept their hold on union power. We have not found evidence to support C. Wright Mills's widely repeated claim that the struggle against the Communists, in the unions they led, was "in most cases . . . not merely a struggle of cliques [but] . . . was also a rank-and-file uprising" (Mills 1948, p. 195). Even after the expulsion of 11 "Communist-dominated" unions from the CIO, none faced a serious internal uprising; and the UE, MM, and ILWU proved to be extraordinarily resilient in the face of combined CIO, government, and corporation assaults. When the UE was really beset by a major uprising, "the sting came from within." For it was led by Communists in its New York–New Jersey district, in 1955, on the eve of the CIO's merger with the AFL, they followed the CP's order to desert the UE and return to the mainstream, and took their district's 20,000 members into the rival IUE and Machinists Union (Aronowitz 1973, pp. 348–49).

"revisionism" and "class collaboration," and then during the later postwar years, when they were under relentless siege?

We find that in all four periods on almost every provision examined, proportionately far more of the local contracts won by Communist-led unions were pro-labor than those won by the unions in the shifting and anti-Communist camps. In fact, most of the contracts in the Communist camp were pro-labor on almost every provision in every period. This was so even during World War II, when the CP advocated class collaboration, and even in the late postwar period, when the Communist-led unions were besieged by enemies on all sides.

World War II

But it is the findings on World War II that must surely leave many readers incredulous. For these are contrary to the nearly monolithic consensus among writers spanning the political spectrum. The simple historical fact revealed here is that—whatever the demands of the antifascist war effort and the rhetorical extremes of CP officials, the wartime contracts won by the Communist-led unions were far *less* likely than those of their rivals on the Right to cede management prerogatives, to sign away the right to strike, or to have cumbersome grievance procedures.

The vast majority, nearly two-thirds, of the wartime agreements won by the Communist-led unions did *not* cede management prerogatives; and only a fraction, roughly a quarter, entirely prohibited strikes for the duration of the contract. But, in contrast, the vast majority of the wartime contracts negotiated by the anti-Communist unions *did* cede management prerogatives and also entirely prohibited strikes (table 4).

What explains this persistence of a distinctive blend of pro-labor provisions in the contracts won by Communist-led unions, even at a time when the party was officially committed to class collaboration in the antifascist war effort? First, and most important, although the Communist unionists surely sought to avoid strikes and promote national unity in the war effort, they were scarcely alone in organized labor. Rather, this was also the policy of both the AFL and CIO. All the CIO unions were officially committed to sacrifice to win the war; they all officially tried to settle their disputes and grievances against management without interrupting production or hurting productivity; they all (with the possible exception of John L. Lewis's UMW, which seceded in 1942) officially adhered to the no-strike pledge throughout the war; and they all (again with the possible exception of the UMW) officially moderated their demands for the duration of the war. In short, in this limited sense, all of the CIO unions shifted to the Right during the war.

So, despite the fervent support of the CP itself for class collaboration

to defeat fascism, the actual practice of the Communist-led unions could still have distinctively expressed their anticapitalist worldview. Therefore, the relative place of the political camps with respect to each other, on the spectrum of pro-labor contractual provisions won by their unions, should not have changed much from the prewar period or in comparison with the postwar years—unless, of course, the Communist-led unions went so much farther in sacrificing their members' interests and granting concessions to management, as is often charged, that they passed even the right-wing unions on the Right. But our analysis of these unions' local agreements, as well as of the UE/GE national agreements, reveals no such drastic shift in practice—at least not on the provisions codifying the political terms of the immediate capital/labor relation.

The antifascist war and defense of Soviet "socialism" presented Communist unionists with an odious political dilemma, namely, how to promote national unity to push war production, while also protecting and advancing their union members' immediate interests. Despite the declamations of CP officials, we suggest that Communists and their radical allies at every level of the local and international union sought in practice to maintain national unity without yielding any hard-won union gains.

Not the party line, but the elemental democratic impulse and egalitarian passion (if not socialist vision) of Communist unionists guided them in their permanent struggle against the companies. "We conducted business as usual in the unions," Dorothy Healey, a leading California Communist and union activist at that time, told us. "We never stopped fighting on the shop floor, whatever the national leadership under [Earl] Browder was saying. I was in the Mine, Mill local at Boniface Aluminum in those days [during the war]—and we never gave anything away." In a later interview she emphasized that "it was the tasks imposed by the day-to-day defense of workers that mattered. We never stopped to ask if what we did violated the no-strike pledge or Browder's incentive plans" (Healey 1981–82).

Healey's memory and our findings are consistent with the serious case studies (by writers whose political views differ markedly) that have tried to get at the record of the activities of specific Communist-led unions and of Communist workers in these and other unions.³⁷ For instance, Robert

³⁷ They are consistent also with the report of an FBI informant highly placed in the party (perhaps Louis Budenz, *Daily Worker* editor from 1940 to 1945). Many Communist unionists complained to the party's national committee during the war, according to the FBI report, that the party was "folding up," abandoning its role as the vanguard of the working class, allying with the reactionary wing of the labor movement, cooperating with capitalism, and abandoning class struggle" (Levenstein 1981, p. 183, citing a May 16, 1944, FBI report). Starobin (1975, p. 258) reports various instances of open conflict between the CP and its members in union leadership.

TABLE 4

PROVISIONS IN CIO LOCAL UNION CONTRACTS IN CALIFORNIA, 1938-55, BY HISTORICAL PERIOD AND CIO POLITICAL CAMP (%)

PERIOD AND POLITICAL CAMP	MANAGEMENT		STRIKE PROHIBITION ^a			CONTRACT TERM	GRIEVANCE PROCEDURE			5-6 PRO-LABOR PROVISIONS ^b
	PREROGATIVE	None	Conditional	Total	Steward		Steps	Time		
Prewar										
Communist	100 (8)	25	37	37 (8)	100 (4)	100 (8)	0 (8)	50 (4)		
Shifting	56 (9)	11	56	33 (9)	17 (6)	100 (9)	0 (8)	0 (6)		
Anti-Communist	20 (15)	0	33	67 (15)	31 (13)	60 (15)	40 (15)	8 (13)		
Log odds ratio (uniform association)	2.21**	72*			1.16*			1.46*		
Standard error	72	38			.63			74		
World War II										
Communist	65 (40)	25	47	27 (40)	92 (38)	82 (40)	71 (38)	53 (32)		
Shifting	45 (11)	36	9	54 (11)	64 (11)	64 (11)	54 (11)	10 (10)		
Anti-Communist	33 (15)	20	7	73 (15)	40 (15)	29 (14)	47 (15)	0 (14)		
Log odds ratio (uniform association)	67*	41*			1.42**	.85**	.93**	2.56**		
Standard error	31	.20			.39	.33	33	.99		
Immediate postwar (1945-47)										
Communist	42 (24)	17	42	42 (24)	79 (24)	87 (24)	75 (20)	33 (12)		
Shifting	32 (28)	7	21	71 (28)	83 (24)	57 (28)	50 (28)	0 (16)		
Anti-Communist	20 (20)	25	10	65 (20)	63 (19)	65 (20)	55 (20)	0 (16)		
Log odds ratio (uniform association)	51+	16			.41	57*	42+			
Standard error	34	21			.36	41	.33			
Later postwar (1948-55)										
Communist	53 (19)	37	21	42 (19)	74 (19)	74 (19)	100 (3)	67 (3)		
Shifting	43 (30)	3	23	73 (30)	70 (30)	60 (30)	43 (7)	0 (5)		
Anti-Communist	18 (17)	6	18	76 (17)	56 (16)	94 (17)	100 (4)	0 (3)		
Log odds ratio (uniform association)	76*	73**			39	1.13**	-.50	-.20		
Standard error	37	28			37	.41	.39	.84		

NOTE.—Ellipses indicate missing data. Numbers in parentheses are *N*'s.^a Dichotomized for log odds ratio, no prohibition and conditional prohibition vs. total prohibition.^b See note to table 2.+ $P < .10$ * $P < .05$ ** $P < .01$

Ozanne, a staunch anti-Communist, found that, in the big Communist-led UAW Local 248 at the Allis-Chalmers plant in Wisconsin during World War II, "grievances were not soft-pedalled. On the contrary, they were magnified . . . in a *bold offensive to enlarge the area of union control*." Engaged in "a bitter struggle with Allis-Chalmers management," Ozanne remarks, the union's Communist leadership "was *unwilling to be sidetracked* merely to comply with Communist [party wartime] policies" (1954, p. 316; italics added; see also Harris 1982, pp. 67-70). Several such case studies reveal, as CIO historian Robert Zieger sums up their findings, that Communist unionists were intent on putting "workers' interests ahead of Party shifts, *even during World War II*" (1980, p. 133; italics added). At the minimum, in Bert Cochran's earlier summary interpretation of some of these same studies, "Communist labor officials, enmeshed in the politics and alliances attendant on their wartime position, [nonetheless] . . . conducted themselves like the next set of CIO officials in contract negotiations" (1977, p. 255).

This conclusion will surprise only those who caricature "Communist labor officials" and simplify the relationship that existed between them and the CP itself (Starobin 1975, p. 269, n. 17). No doubt, as Theodore Draper observes (1985b, p. 46), the CP's officialdom spent most of its energies bearing down on its members at all levels "to carry out whatever policies or campaigns happened to be uppermost at the moment," especially during World War II. But they were not always successful in getting their way, especially with their comrades who held positions of power and had their own political base in major industrial unions; so, "tensions between the communist leaders of several unions and the party" were chronic (Bell 1952, p. 201).

"Trade union Communists," as Brody (1980, p. 227) notes, "had not normally submitted themselves to regular party discipline." Neither, of course, had their radical allies done so. An aversion to bowing to any party's line or submitting to any party's discipline was, in reality, often precisely why many of the most important, enduring allies of the Communists, at all levels of union leadership—including prominent left-wing labor leaders like the ILWU's "Red 'Arry" Bridges, the UE's Clifford McAvoy, and the UAW Local 600's Shelton Tappes—never joined the party itself (Starobin 1975, pp. 12, 258, nn. 50, 51; Tappes 1983)—or, as often happened, left as quickly as they joined but continued, more or less, to align themselves with it in practice.

Communist Party officials were also hampered in imposing a line on Communist unionists because, years before the outbreak of World War II, the party had dissolved its "fractions" (or caucuses) in the CIO unions. This was a Popular Front gesture meant to show that the CP was not interfering "with the normal functioning of the trade unions,

including those with Left and progressive forces in the leadership" (*The Communist*, July 1943, quoted in Glazer [1961, p. 126]). But this gesture probably had the paradoxical effect of making the party's officials themselves dependent on Communist union leaders (and their allies) because they no longer could control or undercut them by appealing to rank-and-file Communists in their unions, who no longer had an organization of their own.³⁸

So, as Nathan Glazer points out (1961, p. 125), "During the war Communist union leaders were treated with kid gloves by the party. . . . Established in the semipermanent tenure of trade-union leadership, they could draw on an independent base of power" and "run their own show." They ran their own show, our evidence reveals, even when faced with the exigencies of the antifascist war and the defense of the Soviet Union, in a way that (however imperfectly) remained consistent with their radical, anticapitalist sensibilities, resulting in their winning contracts that were typically far more pro-labor than those won by their rivals on the Right.

LOGIT ANALYSIS

We have seen that for the entire CIO era and within each of its distinctive periods, the political consciousness of union leaders surely mattered in shaping the provisions of their contracts and thus the political regimes of production in which their unions were involved. Now, in order to measure the independent effects of each of the major variables considered so far, we present the results of a logit analysis. Our logit model measures the effects on the production regime of political leadership, Big Three affiliation, and historical period, as well as of the aging of the union-management relation; it separately compares each of the crucial provisions of the local contracts won by the Communist-led unions and by the unions in the shifting camp with those won by the anti-Communist unions. Similarly, it compares the contracts of locals of the Big Three with those of other locals and, separately, those of the prewar period, immediate postwar period, and late postwar period with those won during World War II.

We find that the odds of the Communist-led unions' winning a pro-labor provision ranged—depending on the provision—from a high of 11 to 1 to a low of at least 2 to 1 (table 5). Also, the odds favored the unions

³⁸ "Until the caucuses were abolished, all the Communists in any given group or in any campaign would map out strategy and tactics together, and a common discipline would be binding on everyone no matter what their echelon or particular task" (Starobin 1975, p. 39).

TABLE 5

LOGIT ESTIMATES OF THE DIRECT EFFECTS OF CIO POLITICAL CAMP, BIG THREE UNIONS, HISTORICAL PERIOD, AND "AGING" OF UNION
IN DETERMINING PRO-LABOR TENDENCIES OF THE POLITICAL REGIME OF PRODUCTION

	MANAGEMENT PROHIBITIVE			STRIKE PROHIBITIVE ^a			CONTRACT TERM			TRADE-OFF ^b			STANDARD			STAGE			TIME LIMITS		
	Logit		Odds Coefficient	Logit		Odds Coefficient	Logit		Odds Coefficient	Logit		Odds Coefficient	Logit		Odds Coefficient	Logit		Odds Coefficient	Logit		Odds Coefficient
	Multiplier	Multiplier		Multiplier	Multiplier		Multiplier	Multiplier		Multiplier	Multiplier		Multiplier	Multiplier		Multiplier	Multiplier		Multiplier	Multiplier	
Communist camp ^c	1.43**	4.18	1.96**	7.10	4.57	1.52**	2.41**	11.13	2.43**	11.36	1.11**	3.03	.71 ⁺	2.03							
"Shifting" camp ^d	.88 ⁺	2.41	.60	1.82	2.48	.91*	1.02*	2.77	-.10	.90	-.08	.92	-.44	.64							
Big Three	-1.46**	23	1.25**	3.49	1.60	.47	.57	1.77	.65 ⁺	1.91	.14	1.15	.14	1.15							
Prewar ^e	.55	1.73	.21	1.23					.53	1.70	.89	2.43	-1.25 ⁺	.29							
Immediate postwar (1945-47) ^f	-1.06**	35	-.47	.62	1.99	.69	.57	1.77	.87 ⁺	2.39	.26	1.30	.19	1.21							
Later postwar (1948-55) ^g	-.78	46	-.70	.50	2.66	.98	-.11	.90	1.11*	3.03	.51	1.66	.63	1.88							
"Aging" con- tracts ^h	.02	1.02	.03	1.03	.82	-.20	.03	1.03	.00	1.00	-.01	.99	.07	1.07							
Intercept	-1.23		-2.71		8.80		-1.58		-1.80		.72		-3.21								
Likelihood ratio chi-square (df)	54.11(7)**		45.66(7)**		19.05(6)**		25.47(6)**		47.84(7)**		13.56(7) ⁺		27.06(7)**								
N	...	236	236	236	196	196	204	191	236	177											

NOTE.—Ellipses indicate data are missing.

^a Strike prohibition is dichotomized, no prohibition and conditional prohibition vs. total prohibition.

^b "Trade-off" is pro-labor if the provision on strikes is not a total prohibition or if the term of the contract is one year or less.

^c The Communist camp and "shifting" camp are each separately compared with the anti-Communist camp.

^d Each period is compared with the World War II period.

^e Aging is measured by the year the contract was signed.

^f $P < .10$

^g $P < .05$

^h $P < .01$

in the shifting camp over those in the anti-Communist camp—except that, on the three provisions of the grievance procedure, the odds were about even for the shifting and the anti-Communist unions. Finally, the estimate of the effect of the aging of union-management relations in the logit model shows no “hardening of the arteries”; rather, its effect on each of the provisions was almost precisely nil.³⁹

CONCLUSION

What inherently vitiates both the pluralist and the Marxist variants of the functionalist theory of the labor union under contemporary capitalism is that they are ahistorical. They either ignore history or, worse, simply postulate an unreal one—one from which real men and women, possessing consciousness and the capacity to act, and to make and remake history, although not just as they please, disappear or are made into mere bearers of systemic imperatives. So, as penetrating as are some of the specific observations and ideas of individual authors in these schools, their analyses unavoidably beg the decisive question, How was the prevailing capital/labor relation and the production regime regulating and enforcing it actually constructed?

For instance, Richard Lester (1958, pp. 32, 104, 120) mentions obliquely that the “Communist-dominated unions have dwindled or disintegrated” but ignores this in his theory of the “underlying forces and impersonal compulsions” that “submerged ideology” and eliminated unions that “stressed hostility toward the . . . capitalistic system.” Similarly, in concluding his analysis of the “generic features” of the prevailing political regime of production, now embodying labor’s “consent” to its own exploitation, Burawoy writes: “After World War II there was much uncertainty as to what would be negotiable in a collective contract, but this *uncertainty* has since been *resolved* in ways that establish management’s prerogative to direct the labor process. *Whatever the reasons for this outcome*, the consequences are relatively clear . . . [namely,] an expanding arena of consent . . . through the constitution and presentation of the interests of the corporation as the interests of all” (1979, p. 120; italics added).

So, in this sort of grand theoretical design, the men who raided and tried to destroy the CIO’s Communist-led unions, aided and abetted by government agencies, as well as by major corporations, and who purged

³⁹ To assess whether the variable, historical period, was somehow “soaking up” and obscuring the real effect of aging, we also ran a logit model excluding it and found that the estimated effect of aging was still nil.

the Communists and their radical allies from the CIO were merely the bearers of "underlying forces" needed to "resolve uncertainty."

But to ignore "the reasons for this outcome," as functionalists must, is, again, to fail to come to grips with the real issue of sociohistorical causality, that is, What accounts for social reality's "characteristic uniqueness"? Why is the political regime of production "historically so," in Max Weber's words (1949, p. 72; italics in original), "and not *otherwise*?"

Thus, the general theoretical question should be posed as follows: What are the independent effects of class struggle in determining whether the prevailing production regime in a country embodies labor's "consent" to capital's dominion? The answer, as our own analysis and findings imply, can be found only through a substantive analysis of the concrete historical circumstances in which the conflict between capital and labor takes place and of the determinants and effects of that conflict. But how this momentous class conflict is fought, and with what consequences, is at least partly contingent on intraclass struggle, on who wins and holds the workers' political leadership. In the United States, it was the defeat of Communists and their allies in the CIO in the period of the emergent Cold War that eliminated "a major barrier," as historian James Prickett correctly argues (1975, p. 419), "to the sort of contracts which became common in the postwar period." This defeat, not capitalism's systemic cunning, accounts for the unions' capitulation to management and for the unchallenged hegemony of capital in the regnant political regime of production in the United States today.

Why the Communists were defeated is another question, and another story. But it surely was *not* because they were not good union men and women. Most of the collective bargaining agreements won by the Communist-led unions effectively denied management the right to exercise unilateral authority over production and held employers maximally accountable to the workers under their dominion. In this sense, the interests of capital and labor were not "coordinated," nor was labor's "consent" embodied in these production regimes. In a word, they were not "hegemonic regimes" (pace Burawoy 1983, p. 590), but "insurgent" or "counter-hegemonic" regimes. For, in "the constant war of capital upon the working and living standards of labor" (*FE News*, May 22, 1946, quoted in Gilpin [1988]), they embodied an altered balance of class power in the workers' favor.

What difference it might have made to organized labor's objectives, strategy, and practices in this "constant war" during the coming decades and what the real historical potential had been for subverting capital within the sphere of production itself are the tantalizing but unanswer-

able questions posed by the defeat of the Communists and their radical allies in those mid-century internecine struggles.

The evidence that we have about what did happen, however, is suggestive of what could have happened. In the aftermath of the Left's expulsion, the CIO merged again with the AFL; and in the years to come the AFL-CIO's international unions, with a few notable exceptions, virtually abandoned any efforts to organize the unorganized. The unionized share of the labor force stagnated and even shrank over the next decades. Worse, faced with heightened employer resistance to unionization and even an offensive against existing unions in recent years, most unions, Michael Goldfield (1987) shows, "have neither devoted the resources nor put sufficient effort into new union organizing to counter the employer offensive" (pp. 216–17). But a union's political orientation has had a measurable effect on its organizing success rate. Thus, where "the former Communist influence lingers on," Goldfield finds that this has been "one factor keeping success in new organizing particularly high." For instance, although the UE and ILWU are no longer what they once were either politically or in size and significance, the UE has had a far-higher rate of success in organizing new members (and winning NLRB union recognition elections) in recent years (1972–84) than the IUE (60.4% vs. 41.3%), and the ILWU has also done better than its East Coast conservative rival, the International Longshoremen's Association (59.7% vs. 51.9%).⁴⁰ The comparative organizing success of these radical remnants are thus also intimations of what might have been—of the suppressed historical possibility for a vital, Left-led, organized working class in the United States—if the CIO had not split asunder at the dawn of the Cold War.

Whether the Communist-led unions' reconstruction of the immediate capital/labor relation, through the class struggle within production, had constituted merely marginal changes or actually touched its essential nature, whether this served not only the workers' immediate but historical interests, prefiguring the "reconstruction of society" and the "final emancipation of the working-class"—whether, in short, this specific historical form of the "coincidence of the changing of circumstances and of human activity can be conceived . . . as *revolutionizing practice*" (Marx 1973, 2:75–76; 1:14; italics in original) is a question we cannot answer.

⁴⁰ These results are further borne out by a cross-sectional regression model controlling for a number of relevant variables. When the union is the UE, it increases the likelihood of success by as much as 12.9%, and when it is the ILWU, by as much as 9.4% (Goldfield 1987, p. 216). During these same years (1972–84), where the UE and the IUE have competed head-on for the workers' allegiance, i.e., in jurisdictions where they both already had sizable bases, the UE "almost always" has won (97.1%) (Goldfield 1987, p. 298).

But the *counter-hegemonic production regimes* constructed by the Communist-led unions surely undermined the sway of capital over the quotidian lives of the working men and women they represented. That this must have been so was indirectly vouched for, remarkably, by the Social Democrats of Sweden, a quarter of a century later. In 1976, they pushed through legislation aimed at "transferring power from capital to labour"; the new law on "democracy in the workplace" made it illegal for union-management contracts to cede managerial prerogatives or prohibit workers from using "industrial action" (strikes, etc.) for the duration of the contract (Stephens 1979, pp. 50, 52, 184-85). So, for that ephemeral moment in America's recent past when Communists constituted "the most important minor party in the union world" (Mills 1948, p. 23), the workers under their leadership measured social actuality against historical possibility and found it wanting—and thus carried out a "practical-critical" rejection (Marx 1973, 1:13) of the inner logic of capitalism.

APPENDIX

The Sample

Our sample is drawn from a batch of nearly 2,000 collective bargaining agreements collected for a survey by the Industrial Relations Center (IRC) of the California Institute of Technology. The survey began soon after the Wagner Act was upheld in 1937 and continued until the mid-1970s, with the aim of providing employers with systematic information on the types of provisions being included in collective bargaining agreements. The IRC sent requests for contracts to local AFL, CIO, and other unions and companies throughout the United States. The clauses of each agreement were coded independently by two IRC staff members, the data were recorded on McBee Keysort cards. We located three persons who had been involved in the contract survey: Victor V. Veysey, director emeritus of the IRC; Joseph W. Lewis, research assistant on the survey; and Verna P. Steinmetz, secretary and coder; but none could provide a copy of the mailing list or further details about the method of collection.

We constructed our sample from this original batch as follows. First, we separated out the batch of 660 CIO agreements. Second, we excluded 32 agreements that had been negotiated between a major employer and an international union. Third, from this collection of local agreements, we also excluded all but one (which was randomly selected) of any set of successive agreements between the same parties. We did this because it was likely that such agreements had the same or similar provisions, thus possibly biasing the sample. These steps resulted in a refined national

TABLE A1
DISTRIBUTION OF CIO LOCAL UNIONS IN THE CALIFORNIA SAMPLE AND
IN THE CALIFORNIA CIO INDUSTRIAL COUNCIL (%)

POLITICAL CAMP	1945 CIO CALIFORNIA CONVENTION			SAMPLE LOCALS
	Locals	Delegates	Votes	
Communist . . .	54	59	48	59
Shifting . . .	21	15	23	19
Anti-Communist	25	26	30	22

sample of 431 local contracts. This national sample is a fund of primary historical data, whether or not it is representative of the contract universe.

Finally (for the reasons given in the text), we extracted the 236 California agreements. To assess the representativeness of this sample, we compared its division into political camps as of 1946-47 with that of a known population, namely, the member unions of California's CIO Industrial Union Council in 1945 (CIO 1945). Nearly all of California's CIO locals in the 1940s belonged to the state's Industrial Union Council. We found that the 1945 California CIO Industrial Union Council convention and this California sample were quite similar in their distributions into political camps (table A1). So it (and thus by inference the refined national sample) is probably fairly representative.

We have deposited the complete IRC batch in the University Research Library, Department of Special Collections, at the University of California, Los Angeles.

REFERENCES

- Alsop, Joseph, and Stewart Alsop. 1947a. "Will the CIO Shake the Communists Loose?" pt. 1. *Saturday Evening Post*, February 22, pp. 105-6, 108.
- . 1947b. "Will the CIO Shake the Communists Loose?" pt. 2. *Saturday Evening Post*, March 1, pp. 26-27, 117-18.
- Aminzade, Ronald. 1981. *Class, Politics, and Early Industrial Capitalism*. Binghamton, N.Y.: State University of New York Press.
- Anderson, Perry. 1967. "The Limits and Possibilities of Trade Union Action." Pp. 263-80 in *The Incompatibles. Trade Union Militancy and the Consensus*, edited by Robin Blackburn and Alexander Cockburn. Harmondsworth: Penguin.
- . 1990. Letter to the authors, March 6.
- Aronowitz, Stanley. 1973. *False Promises: The Shaping of American Working Class Consciousness*. New York: McGraw-Hill.
- . 1989. Letter to the authors, December 12.
- Avery, Andrew. 1946. "The Communist Fifth Column." *Chicago Journal of Commerce*, June 25.

- Barbash, Jack. 1943. "Ideology and the Unions." *American Economic Review* 33 (December): 868-76
- . 1956 *The Practice of Unionism*. New York: Harper.
- Bell, Daniel. 1952. *Marxian Socialism in the United States*. Princeton, N.J.: Princeton University Press.
- . 1961 *The End of Ideology: On the Exhaustion of Political Ideas in the Fifties*. New York: Collier.
- Bernstein, Irving. 1971. *Turbulent Years: A History of the American Worker*. Boston: Houghton-Mifflin.
- Boulding, Kenneth. 1953. *The Organizational Revolution*. New York: Harper.
- Boyer, Richard O., and Herbert M. Morais. 1955. *Labor's Untold Story*. New York: Cameron.
- Brecher, Jeremy. 1990. Letter to the authors, January 8.
- Brighton Labour Process Group. 1977. "The Capitalist Labour Process." *Capital and Class* 1 (Spring): 3-26
- Brody, David. 1980. *Workers in Industrial America: Essays on the 20th Century Struggle*. New York: Oxford University Press.
- Burawoy, Michael. 1979. *Manufacturing Consent: Changes in the Labor Process under Monopoly Capitalism*. Chicago: University of Chicago Press
- . 1981. "Terrains of Contest: Factory and State under Capitalism." *Socialist Review* 11:83-124
- . 1983. "Between the Labor Process and the State: The Changing Face of Factory Regimes under Advanced Capitalism." *American Sociological Review* 48:587-605.
- . 1985. *The Politics of Production: Factory Regimes under Capitalism and Socialism*. New York: Verso.
- California Institute of Technology. n.d. *Union Contract Index Manual*. Pasadena: California Institute of Technology.
- Casey, William J. 1946. "Communism and Your Labor Relations." *Forbes* 58 (August 1). 14-15, 31.
- Caute, David. 1978. *The Great Fear: The Anti-Communist Purge under Truman and Eisenhower*. New York: Simon & Schuster.
- Chamberlain, Neil W. 1948. *The Union Challenge to Management Control*. New York: Harper.
- CIO, California CIO Council. 1945. *"Jobs for All": Proceedings of the 8th Annual Convention, December 5-9, 1945*. San Francisco: California CIO Council.
- Clarke, Tom. 1978. "The Raison d'etre of Trade Unionism." Pp. 7-23 in *Trade Unions under Capitalism*, edited by Tom Clarke and Laurie Clements. Hassocks, England: Harvester.
- Clegg, Hugh Armstrong. 1979. *The Changing System of Industrial Relations in Great Britain*. Oxford: Blackwell.
- Cochran, Bert. 1977. *Labor and Communism*. Princeton, N.J.: Princeton University Press.
- Collins, Orvis, Melville Dalton, and Donald Roy. 1945. "Restriction of Output and Social Cleavage in Industry." *Applied Anthropology* 4 (Winter) 1-14.
- Dahrendorf, Ralf. 1959. *Class and Class Conflict in Industrial Society*. Stanford, Calif.: Stanford University Press
- Davis, Mike. 1980. "The Barren Marriage of American Labour and the Democratic Party." *New Left Review* 124 (November-December): 43-84.
- Derber, Milton. 1945. "Electrical Products." Pp. 682-805 in *How Collective Bargaining Works*, edited by Harry Millis with Natalie Pannes. New York: Twentieth Century Fund.
- Dix, Edward Keith. 1967. *A Study of Collective Bargaining in the Nonferrous Metal*

- Industry*. Ph.D. dissertation. University of Maryland, Departments of History and Economics.
- Draper, Theodore. 1985a "American Communism Revisited." *New York Review of Books* 32 (May 9) 32-37.
- . 1985b. "The Popular Front Revisited." *New York Review of Books* 32 (May 30): 44-50.
- . 1985c "Revisiting American Communism. An Exchange." *New York Review of Books* 32 (August 15) 40-44.
- . 1985d. "Communism Re-revisited." *New York Review of Books* 32 (September 26). 60.
- Drucker, Peter Ferdinand. 1950. *The New York Society: The Anatomy of the Industrial Order*. New York: Harper.
- Dubin, Robert. 1954. "Collective Bargaining and American Capitalism." Pp. 270-79 in *Industrial Conflict*, edited by Arthur Kornhauser, Robert Dubin, and Arthur M. Ross. New York: McGraw-Hill.
- . 1958. *Working Union-Management Relations. The Sociology of Industrial Relations*. Englewood Cliffs, N.J.: Prentice-Hall.
- Emspak, Frank. 1972 *The Breakup of the Congress of Industrial Organizations (CIO)*. Ph.D. dissertation. University of Wisconsin—Madison, Department of History.
- Epstein, Albert, and Nathaniel Goldfinger. 1950. "Communist Tactics in American Unions." *Labor and Nation* 6 (Fall) 36-43.
- Esping-Andersen, Gøsta. 1985 *Politics against Markets. The Social Democratic Road to Power*. Princeton, N.J.: Princeton University Press.
- Filipelli, Ronald. 1970. *The United Electrical, Radio and Machine Workers, 1933-1949*. Ph.D. dissertation. Pennsylvania State University, Department of History.
- . 1984. "UE: An Uncertain Legacy." *Political Power and Social Theory* 4 217-52.
- Flanders, Allan. 1968 "Collective Bargaining: A Theoretical Analysis." *British Journal of Industrial Relations* 6 (March). 1-26.
- Fortune editors with Russel W. Davenport. 1951 *U.S.A.: The Permanent Revolution*. Englewood Cliffs, N.J.: Prentice-Hall.
- Fox, Alan. 1966 *Industrial Sociology and Industrial Relations*. Royal Commission on Trade Unions and Employers' Associations. London: HMSO.
- Galenson, Walter. 1974. "Communists and Trade Union Democracy." *Industrial Relations* 3 (October). 228-36.
- Gates, Albert. 1944 "What Happened at the U.E. Meeting." *The New Internationalist* 10 316-18.
- General Electric. 1938-50 *Agreement between General Electric Company and United Electrical, Radio and Machine Workers of America*. N.p.
- General Motors Corporation. 1937-50. *Agreement between General Motors Corporation and the UAW-CIO*. N.p.
- Giddens, Anthony. 1973 *The Class Structure of the Advanced Societies*. New York: Barnes & Noble.
- . 1982 "Class Structuration and Class Consciousness." Pp. 157-74 in *Classes, Power and Conflict. Classical and Contemporary Debates*, edited by Anthony Giddens and David Held. Berkeley and Los Angeles: University of California Press.
- Gilpin, Toni. 1988. "The FE-UAW Conflict: The Ideological Content of Collective Bargaining in Postwar America." Paper presented at the North American Labor History Conference, Detroit.
- Glazer, Nathan. 1961. *The Social Basis of American Communism*. New York: Harcourt, Brace & World.
- Goldberg, Arthur. 1964 *AFL-CIO United*. New York: McGraw-Hill.
- . 1990. Letter to the authors, January 18.

- Goldfield, Michael. 1987 *The Decline of Organized Labor in the United States*. Chicago: University of Chicago Press.
- . 1989. "Worker Insurgency, Radical Organization, and New Deal Labor Legislation." *American Political Science Review* 83, no. 4 (December): 1257–82.
- Goodrich, Carter. 1920 *The Frontier of Control: A Study in British Workshop Politics*. New York: Harcourt, Brace & Howe.
- Griffin, Larry, Michael Wallace, and Beth Rubin. 1986. "Capitalist Resistance to the Organization of Labor before the New Deal: Why? How? Success?" *American Sociological Review* 51:147–67.
- Halaby, Charles N. 1986. "Worker Attachment and Workplace Authority." *American Sociological Review* 51:634–49.
- Harbison, Frederick H. 1954. "Collective Bargaining and American Capitalism." Pp. 270–79 in *Industrial Conflict*, edited by Arthur Kornhauser, Robert Dublin, and Arthur M. Ross. New York: McGraw-Hill.
- Harris, Howell J. 1982. *The Right to Manage*. Madison: University of Wisconsin Press.
- Healey, Dorothy. 1981–82. Interview with Maurice Zeitlin. Los Angeles, April 10, 1981 and July 8, 1982.
- Hill, Lee, and Charles Hook. 1945. *Management at the Bargaining Table*. New York: McGraw-Hill.
- Howe, Irving, and Lewis Coser. 1957. *The American Communist Party: A Critical History (1919–1957)*. Beacon Hill, Mass.: Beacon.
- Huberman, Leo. 1946 *The Truth about Unions*. New York: Reynal & Hitchcock.
- Huntley, Horace. 1977 *Iron Ore Miners and Mine Mill in Alabama, 1933–1952*. Ph.D. dissertation. University of Pittsburgh, Department of History.
- Hyman, Richard. 1974. "Workers' Control and Revolutionary Theory." Pp. 241–78 in *The Socialist Register 1974*, edited by Ralph Miliband and John Saville. London: Merlin.
- . 1985. "Class Struggle and the Trade Union Movement." Pp. 99–123 in *A Socialist Anatomy of Britain*, edited by David Coates, Gordon Johnston, and Ray Bush. Cambridge: Polity.
- Jacoby, Sanford. 1981. "Union-Management Cooperation: An Historical Perspective." Working Paper Series no. 32 (April). Los Angeles: UCLA Institute of Industrial Relations.
- Jensen, Vernon. 1954 *Nonferrous Metals Industry Unionism 1934–1954: A Study of Leadership Controversy*. Ithaca, N.Y.: New York State School of Industrial and Labor Relations.
- Kampelman, Max M. (1957) 1971 *The Communist Party vs. the CIO*. Reprint, New York: Arno.
- Karsh, Bernard, and Phillips L. Garman. 1961. "The Impact of the Political Left." Pp. 77–119 in *Labor and the New Deal*, edited by Milton Derber and Edwin Young. Madison: University of Wisconsin Press.
- Keeran, Roger. 1980. *The Communist Party and the Auto Workers Union*. Bloomington: Indiana University Press.
- Kimeldorf, Howard. 1988. *Reds or Rackets? The Making of Radical and Conservative Unions on the Waterfront*. Berkeley and Los Angeles: University of California Press.
- Klare, Karl E. 1977–78. "Judicial Deradicalization of the Wagner Act and the Origins of Modern Legal Consciousness, 1937–1941." *Minnesota Law Review* 62:265–339.
- Kornhauser, Arthur, Robert Dublin, and Arthur M. Ross. 1954. "Alternative Roads Ahead." Pp. 501–18 in *Industrial Conflict*, edited by Arthur Kornhauser, Robert Dublin, and Arthur Ross. New York: McGraw-Hill.
- Korpi, Walter, and Michael Shalev. 1980. "Strikes, Power and Politics in the Western Nations, 1900–1976." *Political Power and Social Theory* 1:301–34.

- Lens, Sid. 1947 "Meaning of the Grievance Procedure." *Harvard Business Review* 27:713-22.
- . 1949 *Left, Right and Center: Conflicting Forces in American Labor*. Hinsdale, Ill.: Regnery.
- Lester, Richard. 1958. *As Unions Mature*. Princeton, N.J.: Princeton University Press.
- Levenstein, Harvey A. 1981. *Communism, Anticommunism, and the CIO*. Westport, Conn.: Greenwood.
- Lichtenstein, Nelson N. 1974. *Industrial Unionism under the No-Strike Pledge: A Study of the CIO during the Second World War*. Ph.D. dissertation. University of California, Berkeley, Department of History.
- . 1980. "The Communist Experience in American Trade Unions." *Industrial Relations* 19 (Spring): 119-30.
- . 1982. *Labor's War at Home: The CIO in World War II*. New York: Cambridge University Press.
- Lipset, Seymour Martin. 1960 "The Political Process in Trade Unions." Pp. 357-402 in *Political Man: The Social Bases of Politics*. Garden City, N.Y.: Doubleday.
- Losche, Peter. 1975. *Industriegewerkschaften im Organisierten Kapitalismus: Der CIO in der Roosevelt-Ära*. Opladen, West Germany: Westdeutscher Verlag.
- Magdaline, A. D. 1975. *Lutte de classes et dévalorisation de capital*. Paris: Maspero.
- Mann, Michael. 1973. *Consciousness and Action among the Western Working Class*. London: Macmillan.
- McCullough, Mark. 1988. "The Ideological Dimension of Shop Floor Unionism." Paper presented at the North American Labor History Conference, Detroit.
- McMahon, Edward J. 1969. "Vital Interests of Employer and Union." Pp. 266-67 in *Dealing with a Union*, edited by LeRoy Marceau. New York: American Management Association.
- Marshall, T. H. 1965. *Class, Citizenship, and Social Development*. Garden City, N.Y.: Anchor.
- Marx, Karl, and Frederick Engels. 1973. *Selected Works in Three Volumes*. Moscow: Progress.
- Matles, James J. 1965. "Against the Mainstream Interview with James Matles of the U.E." *Studies on the Left* 5:43-54.
- Matles, James J., and James Higgins. 1974. *Them and Us: Struggles of a Rank-and-File Union*. Englewood Cliffs, N.J.: Prentice-Hall.
- Mills, C. Wright. (1948) 1971. *The New Men of Power: America's Labor Leaders*. Reprint. New York: Kelley.
- Mills, Herb, and David Wellman. 1987. "Contractually Sanctioned Job Action and Workers' Control: The Case of San Francisco Longshoremen." *Labor History* 28 (Spring): 167-95.
- Mine, Mill and Smelter Workers (MM). 1947. *Constitution of the International Union of Mine, Mill and Smelter Workers Affiliated with the C.I.O.* No place of publication given.
- Moore, Barrington, Jr. 1968. *Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World*. Boston: Beacon.
- O'Brien, F. S. 1968. "The 'Communist-Dominated' Unions in the United States since 1950." *Labor History* 9:184-209.
- Oshinsky, David. 1974. "Labor's Cold War: The CIO and the Communists." Pp. 117-51, 310-15 in *The Specter*, edited by R. Griffith and A. Theoharis. New York: Watts.
- Ozanne, Robert. 1954. *The Effect of Communist Leadership on American Trade Unions*. Ph.D. dissertation. University of Wisconsin.
- . 1967. *A Century of Labor-Management Relations at McCormick and International Harvester*. Madison: University of Wisconsin Press.

- Preis, Art. 1972. *Labor's Giant Step. Twenty Years of the CIO* New York: Pathfinder.
- Prickett, James Robert. 1975. *Communists and the Communist Issue in the American Labor Movement, 1920-1950*. Ph D. dissertation University of California, Los Angeles, Department of History.
- Research Institute of America (RIA). 1946 *The Communists in Labor Relations Today: Special Report*. New York. Research Institute of America.
- Roberts, Harold. 1971 *Roberts' Dictionary of Industrial Relations*, rev ed. Washington, D.C. : Bureau of National Affairs
- Roy, Donald. 1952. *Restriction of Output in a Piecework Machine Shop*. Ph.D. dissertation. University of Chicago, Department of Sociology.
- Saposs, David J 1959. *Communism in American Unions* Westport, Conn : Greenwood.
- Schatz, Ronald W. 1983. *The Electrical Workers: A History of Labor at General Electric and Westinghouse 1923-60* Urbana University of Illinois Press
- Seidman, Joel. 1953. *American Labor from Defense to Reconversion*. Chicago University of Chicago Press.
- Selekman, Benjamin M. 1949. "Varieties of Labor Relations " *Harvard Business Review* 27 (March): 175-99.
- Selznick, Philip. 1969. *Law, Society, and Industrial Justice*. New York: Russell Sage
- Skocpol, Theda. 1980 "Political Response to Capitalist Crisis: Neo-Marxist Theories of the State and the Case of the New Deal." *Politics and Society* 10:155-201
- Slichter, Sumner H. 1941. *Union Policies and Industrial Management*. Washington, D C : Brookings
- Soffer, Benson 1959. "On Union Rivalries and the Minimum Differentiation of Wage Patterns." *Review of Economics and Statistics* 41 (February): 53-60.
- Stark, David. 1980 "Class Struggle and the Transformation of the Labor Process: A Relational Approach." *Theory and Society* 9 89-130
- Starobin, Joseph R 1972 *American Communism in Crisis, 1943-1957* Berkeley and Los Angeles: University of California Press.
- Stepan-Norris, Judith, and Maurice Zeitlin. 1989. " 'Who Gets the Bird?' or, How the Communists Won Power and Trust in America's Unions. The Relative Autonomy of Intra-class Political Struggles." *American Sociological Review* 54 (August). 503-23
- Stephens, Evelyn Huber, and John Stephens. 1982. "The Labor Movement, Political Power and Workers' Participation in Western Europe " *Political Power and Social Theory* 3:215-49.
- Stephens, John. 1979 *The Transition from Capitalism to Socialism* Urbana University of Illinois Press.
- . 1989 "Democratic Transition and Breakdown in Western Europe, 1870-1939: A Test of the Moore Thesis." *American Journal of Sociology* 34 (5): 1019-77
- Stolberg, Benjamin. 1939 "Communist Wreckers in American Labor " *Saturday Evening Post*, September 2, pp 5-14, 32, 34, 36
- Taft, Phillip. 1953. "Communism in American Trade Unions " *Industrial Relations Research Proceedings*, December 28-30, p. 23
- . 1964 *Organized Labor in American History* New York Harper & Row
- Tappes, Shelton 1983. Interview with Stepan-Norris and Zeitlin, September, Detroit
- United Automobile Workers (UAW). 1947. *Constitution of the International Union United Automobile, Aircraft and Agricultural Implement Workers of America, (UAW-CIO)*. Atlantic City, N.J United Automobile Workers
- United States Steel Company 1937-50. *Agreement between Carnegie-Illinois Steel Corporation and the United Steelworkers of America*[.] CIO Pittsburgh N.p.
- U.S. Department of Labor. 1946. "Summary Reports " Pp. 56-57 in *The President's National Labor-Management Conference, November 5-30, 1945* Washington, D.C. U.S. Department of Labor

American Journal of Sociology

- Weber, Max 1949. *The Methodology of the Social Sciences*. New York: Free Press
- . 1961. *General Economic History*. New York: Collier.
- . 1968. *Economy and Society*. New York: Bedminster.
- Youstler, James 1956. *Labor's Wage Policies in the Twentieth Century*. New York: Twayne.
- Zeitlin, Jonathan. 1985. "Shop Floor Bargaining and the State." Pp. 1-45 in *Shop Floor Bargaining and the State*, edited by Steven Tolliday and Jonathan Zeitlin. Cambridge: Cambridge University Press.
- Zeitlin, Maurice 1984. *The Civil Wars in Chile (or the Bourgeois Revolutions That Never Were)*. Princeton, N.J.: Princeton University Press.
- . 1985. "The Growing Assault against Unions." *Los Angeles Times*, January 24.
- . 1989. *The Large Corporation and Contemporary Classes*. Cambridge: Polity, New Brunswick, N.J.: Rutgers University Press.
- Zeitlin, Maurice, and Howard Kimeldorf, eds 1984. *Political Power and Social Theory*, vol 4 (devoted to U.S. organized labor, 1930-1950).
- Zetterberg, Hans L 1965. *On Theory and Verification in Sociology*. New York: Bedminster.
- Zieger, Robert H 1980. "Reply to Prof. Lichtenstein." *Industrial Relations* 19 (Spring) 131-35
- . 1984. "The Popular Front Rides Again." *Political Power and Social Theory* 4 297-302

Legal Mobilization as a Social Movement Tactic: The Struggle for Equal Employment Opportunity¹

Paul Burstein
University of Washington

This article attempts to establish theoretical and methodological links between work on social movements and work on the mobilization of law by analyzing legal mobilization as a social movement tactic—the pursuit of movement goals through “proper channels.” Focusing on the movement for equal employment opportunity (EEO), the article considers how often minorities and women mobilize federal EEO laws in their fight for equal treatment in the marketplace, how often they win their cases, and how victory is related to their ability to organize and to get help from the federal government. Analysis of one aspect of the mobilization of EEO laws—in the federal appellate courts—leads to some conclusions very much in keeping with recent work on social movements. They are that the relationship between grievances and mobilization is problematic, that blacks remain central to the struggle for equality in the United States, that resources matter for challengers of the status quo, and that the federal government can be extremely important when it chooses to intervene on the side of women and minorities.

INTRODUCTION

The struggle for equal opportunity—for equal access to the ballot box, to education, to jobs, and to justice—has long been a central focus of American sociology. Sociologists have been especially concerned about

¹ I would like to thank George Farkas, Florence Katz, Mary Fainsod Katzenstein, and Frank Munger for helpful advice and comments. Earlier versions of this article were presented at the Conference on Longitudinal Research on Trial Courts at the State University of New York at Buffalo, 1987, and the 1988 annual meeting of the American Political Science Association. Work on the article was aided by grants from the National Science Foundation and the Vanderbilt University Research Council. I thank Peter Harris and Jan Grigsby for help in developing the coding scheme and data collection and Kathleen Monaghan and Peter Wood for assistance in data collection. Requests for reprints should be sent to Paul Burstein, Department of Sociology, University of Washington, Seattle, Washington 98195.

how opportunities are influenced by race, sex, ethnicity, and other ascribed characteristics. Two streams of research have been particularly important. The first focuses on economic outcomes—why whites earn more than blacks, men more than women, or one ethnic group more than another. Much of our most important work in stratification has been motivated partly by the desire to understand and ultimately to reduce economic inequality among groups (e.g., Blau and Duncan 1967; Lieberman 1980; England and Farkas 1986). The second stream of research focuses on what disadvantaged groups do to reduce economic and other forms of inequality—how they organize, what tactics they adopt, and what obstacles they face as they try to achieve equal opportunity. The civil rights movement, in particular, helped spark a revolution in the study of social movements that has greatly increased our understanding of the political struggles of relatively powerless groups in the United States (see Gamson 1975; Jenkins 1983; McAdam 1983; Morris 1984).

This article links these two streams of research by examining one means used by minorities and women in their struggle for equality: the mobilization of the federal equal employment opportunity (EEO) laws. Recent work on social movements can provide the basis for analyzing how groups fight for EEO; but to be most useful, the customary focus of such work should be (1) narrowed to EEO specifically; (2) shifted to an activity seldom formally analyzed as a movement tactic, litigation in the federal courts; and (3) broadened to consider ethnic and religious minorities as well as blacks and women. In this article I consider how often minorities and women have mobilized federal EEO laws in their fight for equal treatment in the marketplace, how often they have won their cases, and how victory has been related to their ability to organize and to get help from the federal government.

Narrowing the Focus to EEO

Both social movement analysts and stratification researchers would like to know how movement activities influence labor-market outcomes for minorities and women—movement analysts because EEO has long been a central goal of the civil rights and women's movements and stratification researchers because they often hypothesize that labor-market outcomes have been affected by the civil rights and women's movements and by antidiscrimination legislation (e.g., DiPrete and Soule 1986). Unfortunately, little progress has been made in showing how the two are connected; there have been few, if any, attempts to show precisely how particular movement activities have led to particular changes in labor-market outcomes for minorities or women.

This lack reflects a general problem in studies of social movements.

We have made great progress in measuring and explaining changes in movement activity (e.g., McAdam 1983; Jenkins and Eckert 1986) but have devoted relatively little attention to showing how specific activities lead to specific consequences. This is partly because particular activities are generally seen in terms of their relationship to the overall organization and goals of the movement rather than in terms of their contribution to the attainment of particular goals. McAdam's (1983) approach to bus boycotts, for example, is typical; he views them as a tactical innovation in the civil rights movement and not in terms of their success in achieving their manifest goal of equal treatment for blacks and whites on buses.

The struggle for EEO is of course part of a broader battle for equal opportunity. Yet it is also a struggle in its own right—with its own organizations, influenced by particular laws and administrative and judicial decisions, and affected by the specific nature of interactions in the workplace. It seems essential, if we are to understand how movement activity influences economic outcomes, to examine activity directed specifically toward that end. This means focusing at least part of our attention on actions intended specifically to improve employment opportunities for minorities and women.

Litigation

What types of actions should we examine? For most sociologists, and for many political scientists studying social movements, the distinction between political action “inside the system” and that taking place “outside” is critical. They see groups resorting to a “politics of protest” when they are not allowed to use institutionalized channels to express their political demands or when such channels prove ineffective. Those interested in social movements see themselves as examining political behavior not directed into “proper channels”—that is, demonstrations, strikes, and boycotts, as opposed to election campaigns, lobbying, or legal proceedings.

This distinction is often useful, but at times it impedes progress in understanding political change. Those using outsider tactics are often trying, first, to gain access to power holders and, then, to influence their decisions. By defining their interests in terms of particular tactics, those studying social movements virtually force themselves to abandon the field of inquiry when the groups they are interested in begin to have influence—when they gain access to proper channels.

I suggest that successful movements generally utilize proper channels as well as outsider tactics and that an adequate understanding of movements must therefore consider both. In fact, social movement analysts seem to recognize this, even if only implicitly. This implicit recognition

takes two forms: in definitions of social movement and in analyses of particular movements. As for definitions, consider one of Tilly's recent attempts to define social movement (1984, p. 305; italics in original): "The term *social movement* applies most usefully to a sustained *interaction* between a specific set of authorities and various spokespersons for a given challenge to these authorities. The interaction is a coherent, bounded unit in roughly the same sense that a war or political campaign is a unit." Tilly struggles to limit the definition to outsider groups, but nothing in it excludes the legal tactics often employed by the civil rights movement, even though such tactics involved going through proper channels.

In fact, analysts of American social movements frequently ascribe importance to court cases. McAdam, for example, shows that a Supreme Court decision on segregation had a critical effect on the bus boycotts (1983, p. 741), while Harding (1984, pp. 393–95) argues that the decisions of a federal judge undermined the hegemony of white-supremacist ideology in Mississippi (also see Jenkins and Eckert 1986, p. 827). The role of the courts is seldom the subject of theorizing because so much emphasis is placed on demonstrating the importance of outsider tactics. Yet deep historical knowledge of particular movements consistently forces social movement analysts to report how critical court decisions are.

It is, in fact, impossible to understand the American struggle for equal opportunity without focusing on the courts and on activities intended to influence judicial decisions. The long campaign of the National Association for the Advancement of Colored People (NAACP) leading to the Supreme Court's decision in *Brown v. Board of Education* is especially well known (see Pole 1978, pp. 265–67), but other judicial decisions were also critical, including those on freedom of association that facilitated organizing in the South, those on economic regulation that paved the way for EEO legislation, and those that interpreted EEO broadly rather than narrowly (Gunther 1975, chaps. 13–14; Burstein 1985; Schlei and Grossman 1983; cf. Collins 1979, p. 198). In Tilly's language (1984), litigation has been an important part of the repertoire of those seeking equal opportunity, at least since the NAACP began its campaign against segregation during the 1930s.

This is not a new point. Indeed, some political scientists and legal scholars have long argued that the mobilization of law should be considered a form of political participation potentially useful to the disadvantaged in their struggles for rights and benefits (Zemans 1983; see the development of the term in Black [1973]). Using arguments similar to those made by students of social movements, those studying legal mobilization have been concerned about how difficult it is for outsider groups to gather resources, how the rules for participation may be weighted

against them, and how they confront adversaries who control greater resources.²

Conceptually, the study of legal mobilization strongly resembles the study of social movements, but methodologically they differ substantially. The great advances in sampling, measurement, and statistical analysis made by social movement analysts (e.g., Gamson 1975; Tilley 1978; McAdam 1983, Jenkins and Eckert 1986) have not been matched by those studying legal mobilization. This situation is beginning to change (e.g., Galanter 1983, 1990; Wheeler et al. 1987; Burstein and Monaghan 1986), but much would be gained if quantitative analysts of social movements and legal mobilization scholars would adopt each other's approaches and techniques. That is what I propose to do in this article.

Minorities and Women

Americans normally think of the civil rights movement as a movement for the rights of blacks. But all 20th-century federal civil rights laws prohibit discrimination on the basis of religion and national origin as well as race, and some provisions, including Title VII of the Civil Rights Act of 1964, the most important EEO law, also forbid discrimination on the basis of sex. This was hardly a happenstance. Racial, religious, and national-origin minorities and women have all been the victims of discrimination, and all brought pressure to bear on Congress when it was considering civil rights legislation (Bergmann 1986; Burstein 1985; Lieberman 1980).

Title VII thus gave women and a variety of minorities, not just blacks, a resource to use in their struggle for EEO. In fact, the law made them allies, in that usually a victory for one group was a victory for all. For example, the logic of the law quickly turned a ban on one kind of exclusionary want ad ("whites only") into a ban on all (including "help wanted—male"); successful challenges to racially segregated seniority lines wound up eliminating sexually segregated seniority lines as well. (Of course, the various groups are not equally concerned about all issues, and there have even been conflicts among them, but on the whole there is great commonality of interest.) To determine how social movement activity influences labor-market outcomes, it is necessary, therefore, to

² See Galanter 1974, Sabatier 1975; Handler 1978, Zemans 1983. Of course, the law has often been mobilized by the advantaged against the disadvantaged, the movements for civil rights in general and EEO in particular have at times involved legal mobilization and countermobilization by competing groups struggling for support at the highest levels of the legal system, see, e.g., Barkan 1984, Burstein 1991

consider the activities of all groups covered by Title VII. This means, in turn, having to move beyond the customary focus of movements research on blacks or women to a consideration of the activities of racial, religious, and national-origin minorities and women. Only by doing so is it possible to get a realistic picture of the scope and nature of activities devoted to the achievement of EEO.

The Questions

This article is the first to examine systematically how the EEO laws have been mobilized by women and by minorities as defined by race, religion, and national origin, comparing the groups with each other and describing how their experiences have changed. It differs from previous work on the civil rights and women's movements by focusing on EEO, on litigation, and on several groups simultaneously, from conventional legal scholarship by going beyond the customary focus on leading cases to the quantitative analysis of an entire population of cases; and from previous work on the mobilization of EEO law (Burstein and Monaghan 1986; Burstein 1989) by systematically analyzing changes in the activities of different groups over time.

The article addresses three questions about the mobilization of the EEO laws, questions analogous to those asked about the use of outsider tactics by social movements. First, to what extent have the groups mobilized, and how has the degree of mobilization changed? We cannot even begin to understand the struggle for equal opportunity until we can describe it.

Second, how often do minorities and women win their EEO cases? This question addresses three concerns—that the legal process is somehow rigged against minorities and women so that they seldom win, that the courts might favor some groups over others, and that perceived changes in the political climate may have reduced minorities' and women's chances of winning.

Third, is victory in court related to organization? Is it true for minority and female litigants, as it is for groups using outsider tactics, that, as Gamson has written (1975, p. 108), there are "definite advantages for a challenging group . . . to organize itself for facility in political combat"?

DATA

The ideal study of the struggle for EEO would begin by analyzing individuals' grievances over their treatment in the labor market, including both the objective conditions associated with grievances and the social and psychological forces affecting how people respond (see Snow et al.

1986). It would then analyze how those with grievances assess their options (possibly including individual action, collective action, and doing nothing), examine what options they choose, and trace what they do if initial attempts to resolve their grievances fail. Unfortunately, the ideal design is not practical; no one studying any movement has data on all the relevant actions and sequences of events.

What should a practical study of EEO litigation focus on? Arguments can be made for various designs, but the lack of previous quantitative work on legal mobilization means there are few models. This article is based primarily on an analysis of virtually all published decisions in EEO cases concerning discrimination on the basis of race, religion, sex, and national origin decided by the federal appellate courts from the adoption of the Equal Pay Act of 1963 to early 1985. The focus is on appellate courts (including the Supreme Court) because their decisions are the most important; their decisions become the leading cases and establish the critical precedents (Howard 1981; Priest 1980), and it is widely believed that what happens in the appellate courts will be critical for women and minorities in their battle against discriminatory employment practices (Belton 1981; Bergmann 1986; Glazer 1978).

The method employed is content analysis, which has been at the center of quantitative work on social movements ever since the pioneering work of Gamson (1975) and Tilly (1978). Systematic content analysis is becoming more important in the social scientific study of law as well, but few studies thus far employ multiple coders and utilize conservative measures of reliability to gauge data quality (Johnson 1987). This study does both.

The cases include those based on Title VII, the most comprehensive EEO law, and those based on other laws prohibiting some forms of discrimination in employment, including the Equal Pay Act of 1963 (29 U.S.C. sec. 206[d]), which prohibited paying men and women different wages for the same work; the Civil Rights Acts of 1866 and 1871 (42 U.S.C. sec. 1981 and 42 U.S.C. sec. 1983, respectively), which prohibited racial discrimination in various contexts; the United States Constitution; and the Railway Labor Act of 1926 (45 U.S.C. secs. 151–88) and the Labor Management Relations Act of 1947 (29 U.S.C. sec. 151 and following), which banned certain forms of racial discrimination by treating it as an unfair labor practice.

The focus is on the ultimate court resolution of EEO disputes; the unit of analysis is therefore the case, not the decision; cases heard more than once were coded as of the final decision (as of the cutoff of data collection). Cases were included if they were published in volumes 1–36 of *Fair Employment Practice Cases* (Bureau of National Affairs 1969–86), if they were either based on the Equal Pay Act of 1963 or decided after July 2, 1965 (the effective date of Title VII), if they were decided during

or before February 1985 (the cutoff date of vol. 36, the last volume available when data collection was completed), and if the report of the case was at least one page long (shorter opinions provide too little information to be useful). So-called reverse discrimination cases were not analyzed. The total number of cases analyzed was 2,081 (Burstein 1988). Further description of the data, data collection, and reliabilities may be found in Burstein and Monaghan (1986).

Three other aspects of the research design require explanation. First, the cases include those brought by individuals acting on their own as well as those involving groups or organizations. Tilly (1978, p. 85) would not consider such cases collective actions, so he might exclude them from a study of mobilization. Many laws, however, and particularly Title VII, are intentionally structured so that individuals acting on their own are also effectively acting on behalf of others—the legal phrase is that they are acting as “private attorneys-general” (Zemans 1983). Particularly with regard to published appellate court decisions, which may influence vast numbers of workers and employers, it is essential to include cases brought by individuals in any meaningful study of legal mobilization as a social movement tactic.

Second, appellate decisions are not a random sample of disputes about allegedly discriminatory employment practices; they are produced through a complex and little-understood process in which many initial complaints about employment practices are winnowed down to the few leading to appellate decisions. But the justification for studying appellate cases is not in their being a random sample but rather in their great importance; they influence the judgments of employees (and their lawyers) about whether particular disputes are worth pursuing and set the terms within which employees bargain with employers or unions in the hope of settling out of court.³ The approach I take here is essentially that adopted in all studies of politics in which social scientists focus on the especially important (major revolutions, protests deemed newsworthy by the *New York Times* or worth describing by historians) or the especially accessible (public protests rather than private discussions). This may not be ideal, but it is practical and useful.

³ See Priest (1980) and Eisenberg (1988) for a discussion of these issues. Kuhn (1987) briefly analyzes the possible relationship between the experience of employment discrimination and the perception of it, Donohue and Siegelman (1989) analyze changes in the EEO caseload in the district courts, and Eisenberg and Schwab (1987) and Eisenberg (1988) discuss trends in outcomes in EEO cases in the district courts. None of these formally link what happens at one stage of the mobilization process to what happens at other stages, none distinguish among different minorities and women, and, with the exception of federal involvement in the cases (to be discussed below), none provide data on the role of organizational involvement in the cases.

Third, and finally, although this article is justified in part by the desire to show how social movement activity ultimately affects labor-market outcomes, it does not actually do so; it does not show how judicial decisions have influenced employers. But, again, the contrast should be not with an ideal design but with designs that are practical and conventional. To the extent that studies of social movements are about politics, as opposed to being organizational studies that happen to focus on organizations involved in politics, they must be concerned ultimately with the achievement of political goals (Gamson 1975). Yet most studies of movements focus on their actions and organization, neglecting to show how action and organization affect the attainment of particular goals (presumably because of the difficulty of doing so). Here the focus is on a particular goal: the winning of court cases. The goal is an intermediate one, not the ultimate goal of improving labor-market outcomes for minorities and women, but it is a meaningful one nevertheless.

MOBILIZING THE EEO LAWS

How often will laws be mobilized by those they are intended to protect? Two hypotheses are especially important. The first, which Galanter calls the "underlying activity" hypothesis (1990), is that mobilization will be a function of the incidence of activities prohibited by the law—in this case, discrimination in employment; the number of complaints initiated by members of a group will depend on the size of the group and the pervasiveness of discrimination its members face. The second is that the relationship between being treated badly and taking legal action is problematic—a group's mobilization of the EEO laws may depend on how it is organized, its members' perceptions of their circumstances, economic conditions, and the political climate, and on some objective measure of what happens to its members (Galanter 1983, p. 61; 1990; Stinchcombe 1978, p. 40; Jenkins 1983, p. 530; Zemans 1983, p. 697). If the underlying-activity hypothesis is correct, the mobilization of EEO laws should have been very frequent initially (perhaps allowing for a delay while people learned about them), in line with the high levels of discrimination existing in the 1960s, and should then have gradually declined, in line with the decline in discrimination widely believed to have occurred. If, in contrast, the relationship between discrimination and legal mobilization is problematic, mobilization could occur in any pattern; if the climate for enforcement were relatively favorable, as many believed it to be in the 1960s and at least the early 1970s, mobilization might have increased as groups learned to use the laws and saw themselves winning cases, while mobilization may have declined in the 1980s as the political climate changed.

What proportion of disputes should be expected to revolve around each basis of discrimination (that is, race, religion, sex, and national origin)? If mobilization were simply a function of the incidence of discrimination, then the larger a group, and the more pervasive the discrimination against it, the greater the proportion of all disputes it would initiate. Estimates of the pervasiveness of discrimination against various groups suffer from considerable uncertainty, but enough is known to permit some conclusions about relative victimization and hence about the plausibility of seeing mobilization as primarily a function of victimization.

Women are the largest group to suffer from employment discrimination, and studies that gauge discrimination in the usual social scientific way, by measuring intergroup income differences with indicators of human capital controlled for, suggest that women also suffer more from discrimination than racial, religious, or national-origin minorities (Cain 1986; admittedly, not everyone agrees). They should therefore initiate the highest proportion of EEO disputes. Blacks might be responsible for the next highest proportion of disputes; they are a much smaller group but have suffered greatly from discrimination. (Under the law, black women may complain of discrimination as blacks, or as women, or as both; the data do not identify black women specifically.) The proportion of cases initiated by national-origin and religious minorities is difficult to predict; many Americans are members of ethnic and religious minorities (including Catholics, the victims of much discrimination in the past), but they are believed to suffer little discrimination these days.

Trends in mobilization and the proportion of EEO disputes involving each basis—race, sex, national origin, and religion—are shown in table 1, which presents data on both complaints to the Equal Employment Opportunity Commission (EEOC) and appellate court decisions.

The data are consistent in one way with the underlying-activity hypothesis. Over 80% of EEO disputes involve claims of racial or sexual discrimination, while only about 10%–12% have been based on national origin (with two-thirds of those cases involving Hispanics) and 2%–3% on religion (with about half of those claims involving Jews). The data thus conform to contemporary notions that discrimination on the basis of national origin and religion is less pervasive than that on the basis of race or sex. (The decline in discrimination against national-origin and religious minorities is a worthy subject in its own right. But the small percentages represent thousands of changes per year, so these kinds of discrimination must be seen as still of some importance.)

The data are more consistent with the alternative hypothesis, however—that mobilization depends on ideas, organization, economic conditions, and political climate as well as victimization. Complaints and cases have increased rather than declined, a result more explicable in terms

TABLE 1

CHARGES AND COURT CASES, BY BASIS

Year	TOTAL		% RACE		% SEX		% NATIONAL ORIGIN		% RELIGION	
	Charges	Cases	Charges	Cases	Charges	Cases	Charges	Cases	Charges	Cases
1965....	..	1	..	100	...	0	..	0	...	0
1966	5,522	7	59	100	37	0	2.4	0	1.6	0
1967 . . .	7,449	5	64	80	27	0	6.4	20	2.3	0
1968 . . .	10,072	11	66	82	24	18	7.2	0	2.9	0
1969 . . .	13,674	17	70	65	20	29	8.0	6	2.4	0
1970.....	16,802	24	70	83	21	8.7	6.1	8.7	2.3	0
1971 . . .	24,934	63	62	72	23	21	12	3.3	2.7	3.3
1972.....	44,401	81	62	63	24	31	12	3.8	2.6	2.6
1973.....	103,700*	77	53	60	33	36	12	2.7	2.2	1.4
1974.....	118,561	87	55	61	33	29	10	6.7	2.3	3.4
1975.....	62,507	122	55	57	32	36	10	2.5	2.3	4.2
1976.....	100,463	110	56	63	31	27	11	4.9	2.4	4.9
1977.....	84,027	177	57	47	30	43	11	6.1	2.3	3.7
1978....	67,403	131	57	46	30	45	11	7.8	2.1	1.4
1979.....	74,818	126	53	42	30	48	11	4.8	6.3	4.8
1980.....	84,351	190	54	50	33	39	10	8.7	2.2	2.0
1981 . . .	87,506	216	52	52	35	36	11	7.5	2.3	3.7
1982.....	83,120	204	51	51	36	44	10	2.8	2.3	1.9
1983.....	99,093	209	49	49	36	45	11	4.5	2.5	.9
1984.....		198		46		43		8.4		2.5
1985.....		25		48		43		4.3		4.3

NOTE.—Charges include only Title VII, data are available on Equal Pay Act complaints from the late 1970s on, and inclusion of such complaints would increase somewhat the percentage involving women. Charges included above are those listed under race, religion, national origin, and sex only, other bases, including retaliation, are ignored. No data are available on charges for 1984 and 1985. Cases brought under all relevant laws, including secs. 1981 and 1983, used mostly by blacks, are included. In the EEOC Annual Reports, cases with multiple bases are apparently counted separately under each, to conform with this, court cases involving allegations of both race and sex discrimination were also double counted, but the bases in cases coded originally as "other combination" could not be disentangled, so such cases, amounting to 6.2% of the total, were excluded from this table. "Reverse discrimination" cases were also excluded. The 1985 total extends through end of data collection only.

* Coverage of Title VII expanded to include state and local governments

of group perceptions and organization than in terms of victimization (Donohue and Siegelman [1989] reach analogous conclusions for cases at the district level).

Comparing the different groups gives this interpretation greater force. Immediately after Title VII was adopted, blacks initiated far more EEO disputes than any other group—through 1970, about two-thirds of the official charges and three-fourths of the appellate cases—even though women were arguably even more disadvantaged in the labor market. The most plausible reason for this is that blacks were far better organized to take advantage of Title VII. They were highly conscious of discrimination and were widely perceived as its victims, they were relatively well organized, and they had long used litigation to attack discrimination.

The proportion of disputes involving blacks has slowly declined, however (to a degree statistically significant at the .01 level), because sex-discrimination claims have increased—recently almost as many appellate cases concern discrimination based on sex as on race. This increase must be partly due to women's increasing participation in the labor force, but that cannot be the whole explanation because women have long outnumbered blacks in the labor force. Much of the increase is probably due to increases in both the prevalence of the belief that women deserve to be treated as well as men and the organizational strength of women's organizations (see Bergmann 1986). The mobilization of EEO laws must depend on more than victimization.

WINNING AND LOSING

"Success," Gamson has noted (1975, p. 28), "is an elusive idea" when one studies social movements, difficult to define and measure. One advantage of studying court cases is that it is relatively clear who has won and who has lost (albeit with regard to small skirmishes in a much larger conflict). Even so, questions may be raised about how much plaintiffs have to gain to be declared winners—Must they get everything asked for? Half? Anything?—and whether plaintiffs might be deluded into thinking they have achieved a meaningful victory when they have only been co-opted.

The approach I adopt here parallels Gamson's. I count all victories as being for the plaintiffs, even if they did not get all they asked for and even if an outside observer might not interpret the result the same way as the participants. The victories are analogous to what Gamson calls "new advantages," as opposed to "acceptance," which, by his definition, is gained by any group that has gotten to court (for further discussion of the problems involved in measuring success in litigation, see

Eisenberg and Schwab [1987, pp. 676–77] and Burstein and Monaghan [1986]).

What proportion of cases might plaintiffs be expected to win? Previous work on social movements makes no specific predictions about the likelihood of victory for challenging groups, for the overall cause they represent, or for specific conflicts that might be part of a larger struggle. The implicit message of most such work, however, is that it is very difficult for outsider groups to organize and succeed (Gamson 1975); victories are likely to be the exception rather than the rule.

Much work in the sociology of law reaches the same conclusion; the poor or disadvantaged are seen as likely to lose in court, especially when confronting employers (e.g., Galanter 1974; Wheeler et al. 1987).

There is a competing point of view, however. Priest and others (Priest 1980; Priest and Klein 1984; cf. Galanter 1974) suggest that the decision to go to court is the product of a careful consideration of likely costs and benefits. It makes no sense to predict that plaintiffs will generally lose because, if plaintiffs see they are likely to do so, they will try to settle out of court or even decide not to pursue the case in the first place. (McAdam [1983] makes a similar argument when discussing why protesters would abandon a tactic once their opponents had developed an effective countertactic.) Potential defendants would make similar calculations. The cases fought out to a judicial decision would be those whose outcome is most uncertain. Over time one would expect plaintiffs to win roughly half the time, and defendants the other half. Large departures from such a division would cause cases whose characteristics are associated with losses to be brought less frequently, with the result that, in the long run, plaintiffs would win about half the time.

From this point of view, if the legal system were working against EEO plaintiffs, the result would be seen not in consistent losses but in initial losses leading to the realization that the odds are against them and in their ceasing to bring as many cases. As we have already seen, however, both complaints and appellate cases continue to increase.

Predicting the likelihood of victory is further complicated by the possibility that not all groups win equally often. Some scholars argue that the courts are more sympathetic to blacks than to women, while others have claimed the reverse; it has also been suggested that plaintiffs whose cases are based on national origin are especially unlikely to win (O'Connor and Epstein 1983; Stidman, Carp, and Rowland 1983; Keotahian 1986).

In addition, the likelihood of victory may change. Some have argued that EEO cases may generally become more difficult to win over time, as the relatively easy cases involving blatant discrimination are resolved and are succeeded by more difficult, second-generation cases in which

the issues are subtler and discrimination harder to prove (Blumrosen 1984). Or changes in the political climate may affect how sympathetic federal agencies or judges are to EEO plaintiffs.

Data on plaintiff victories, the relative success of different groups, and change over time are presented in table 2, which is derived from a log-linear analysis of a three-way cross-tabulation of case outcomes (victory vs. defeat) by basis and by presidential administration (using the program described in Norusis [1986, chap. 7]). The data are divided by administration because, although no theory predicts how the proportion of victories might change over time, many observers argue that the enforcement of EEO legislation has changed from administration to administration, with Presidents Johnson and Carter being more sympathetic to plaintiffs than Nixon, Ford (included with Nixon in the tables), and, especially, Reagan. Because appellate cases take considerable time to come to fruition and presidential influence takes time to make itself felt, the periods are lagged by a year, so cases included as President Johnson's run through the end of 1969, Nixon's and Ford's from 1970 through 1977, Carter's from 1978 through 1981, and Reagan's from 1982 on. (Other lags and periodizations, including dividing the cases into those decided before and after the 1972 amendments to Title VII and dividing them into periods each containing roughly a fourth of the cases, produce substantively identical results. Changes occurring after 1985, the most recent data included, could not be taken into account.)

Contrary to what one might expect from previous work, plaintiffs do not lose most of their cases, or even half—they win 58% for the whole period. Over time, the likelihood of plaintiff victory does decline but very slowly; the correlation with year is $-.085$. This trend is the same for all groups; blacks register the greatest decline ($-.11$), but it is still small.⁴

Although groups share a trend, they are not all equally likely to win. Blacks and women do equally well (both separately and in suits involving both), but they are significantly more likely to win than either national-origin or religious minorities. This runs counter to claims that judges are more favorable to blacks than to women, or vice versa, but supports the suspicions of some that national-origin and religious minorities are not treated as well. Most likely to win are plaintiffs in cases involving other combinations of bases—meaning, most often, allegations of discrimination on the basis of race, sex, and national origin.

Some groups may do better than others for various reasons. Judges may be more sympathetic to blacks and women than to national-origin

⁴ Plaintiffs appear to do better at the appellate level than at the district court level, neither this difference nor some variations among subsets of cases can be explained very well at the current stage of theoretical development (see Eisenberg 1988).

TABLE 2
PERCENTAGE OF CASES WON BY PLAINTIFFS, BY BASIS AND ADMINISTRATION

Basis	Johnson	Nixon	Carter	Reagan	1965-85
Race ($n = 969$)	77	62	53	54	58
Sex ($n = 675$)	67	61	59	55	58
National origin ($n = 119$)....	0	58	38	53	47
Religion ($n = 58$)		42	60	25	45
Race and sex ($n = 132$)	100	62	55	57	58
Other combination ($n = 128$)..	100	76	62	55	67
All groups....	73	62	55	54	58
<i>N</i>	41	740	658	633	2,081

NOTE.—Relationship between basis and victory significant at .01, between victory and administration at .002; among all three variables, N S Ellipses indicate that there were no cases in original tables (see text)

or religious minorities, feeling that the discrimination blacks and women face is more serious. Differences in how the groups are treated in the statutes and by administrative agencies may be important; for example, employers can treat sex, national origin, and religion, but not race, as bona fide occupational qualifications, and employers are required to keep more detailed records about the race and sex of their employees than about their national origin or religion. Or some groups may have more resources or be better organized than others. It is to this last possibility that I now turn.

ORGANIZATIONAL MOBILIZATION AND PLAINTIFF VICTORY

Central to current work on both social movements and legal mobilization is the idea that resources matter, that individuals and groups challenging the status quo are likely to lose unless they acquire more than their original resources—by organizing, gaining assistance from powerful organizations, acquiring the help of experts (including good lawyers), and so forth (Gamson 1975; McCarthy and Zald 1977; Jenkins 1983; Jenkins and Eckert 1986; Galanter 1974; Lempert and Sanders 1986, pp. 396–97; Wheeler et al. 1987).

The EEO and other laws provide four ways for potential EEO plaintiffs to overcome initial disadvantages by pooling resources—that is, by turning individual suits into collective actions (see Tilly [1978] on collective action). Multiple plaintiffs may join in a class action; the federal government may become a plaintiff with or on behalf of alleged victims of discrimination; the federal government may file an *amicus curiae* brief on behalf of the plaintiffs; and other individuals and organizations (in-

cluding civil rights and women's organizations) may act as *amici curiae* and provide legal assistance.

How often do EEO plaintiffs utilize these modes of collective action? Do all the groups take equal advantage of them? Is the likelihood of engaging in collective action changing over time? And, most critically, is collective action related to victory?

Table 3 shows how often each group has been involved in each type of collective action. The most common form of collective action—used in 45% of the cases—is class action (table 3, pt. D). Help from the federal government is much less frequent; it is a party in 16% of the cases and acts as *amicus* in 8%. Nonfederal organizations participate infrequently—acting as *amicus* in just 7% of the cases—as might be anticipated from previous work on the difficulties faced by reform organizations trying to participate in the judicial process (e.g., Handler 1978, chap. 4).

Table 3 also shows who gets the available help. All groups are equally likely to get help from a federal or nonfederal *amicus*. But federal involvement as a party and class actions are a different matter. Cases involving combinations of bases—of both race and sex and of other combinations—are especially likely to involve class action or the federal government as a party. Many such combination cases are “pattern or practice” suits brought against large employers, challenging a wide range of employment practices affecting most or all employees. It is easy to see why such cases would be organized on a class basis and why there would be federal involvement.

In cases involving complaints about only one type of discrimination—race, sex, religion, or national origin—race and sex cases are significantly more likely to involve a federal party or class action than cases involving national origin. Plaintiffs alleging religious discrimination are really on their own, compared with members of other protected groups; very few religion cases involve federal plaintiffs or class action. The few legal scholars writing on national-origin EEO cases complain that such cases are not taken as seriously as race and sex cases (e.g., Keotahian 1986); they do get less help than blacks or women, but those bringing religion cases are even less likely to be aided by the federal government or even by other individuals in the same minority.

From one perspective, EEO plaintiffs are increasingly well organized over time, because the number of cases involving collective action has increased. Before 1975, for example, the federal government was a party in roughly 10 cases per year; in the 1980s, however, the number rose to about 23. Similarly, federal participation as *amicus* rose from five cases per year to 12 or so, nonfederal *amici* from 2.5 to 16, and class actions from 25 to 75 (in the face of a substantial decline in the total number of

TABLE 3

PERCENTAGE OF ORGANIZATIONAL MOBILIZATION BY BASIS AND ADMINISTRATION

Basis	Johnson	Nixon	Carter	Reagan	1965-85
A Cases in which federal government was party on side alleging discrimination.*					
Race ($n = 969$)	32	19	9	8	13
Sex ($n = 674$)	17	22	16	15	17
National origin ($n = 119$)	0	18	6	9	10
Religion ($n = 58$)		4	5	8	5
Race and sex ($n = 131$)	100	15	33	14	22
Other combination ($n = 128$)	100	49	28	9	34
All groups	32	21	14	11	16
N	41	741	662	635	2,079
B Cases with federal amicus on side alleging discrimination:†					
Race ($n = 956$)	10	11	6	4	8
Sex ($n = 667$)	50	12	9	5	9
National origin ($n = 118$)	0	6	14	6	9
Religion ($n = 58$)		20	25	0	17
Race and sex ($n = 131$)		12	8	5	8
Other combination ($n = 128$)	0	5	8	12	8
All groups	12	11	9	5	8
N	25	736	662	635	2,058
C Cases with nonfederal amicus on side alleging discrimination ‡					
Race ($n = 955$)	0	6	7	8	6
Sex ($n = 669$)	50	6	6	8	7
National origin ($n = 117$)	0	6	10	6	8
Religion ($n = 58$)		12	5	0	7
Race and sex ($n = 131$)		12	6	9	8
Other combination ($n = 128$)	0	10	8	22	12
All groups	4	7	7	8	7
N	25	735	662	636	2,058
D Cases that are class actions §					
Race ($n = 962$)	52	56	43	38	47
Sex ($n = 671$)	33	52	40	36	42
National origin ($n = 118$)	0	25	34	24	28
Religion ($n = 58$)		4	5	8	5
Race and sex ($n = 129$)	0	58	63	55	58
Other combination ($n = 127$)	100	90	51	53	70
All groups	46	54	42	38	45
N	41	734	656	634	2,065

NOTE — Ellipses indicate that there were no cases

* Relationships between basis and federal party, basis and administration, and federal party and administration all significant at $< .001$, relationship among all three variables significant at .05 by log-linear analysis, likelihood ratio χ^2

† Relationship between federal amicus and administration statistically significant at .001; between basis and federal amicus, and among all three variables, N.S.

‡ Relationships between basis and amicus, amicus and administration, and among all three variables, N.S.

§ Relationship between basis and class action, and between class action and administration, significant at $< .001$, among all three variables, N.S.

class actions pursued in federal court; see Martin 1988). The number of cases has grown even faster, however, so the proportion involving a federal party, federal amicus, or class action has declined (there is no statistically significant trend for nonfederal amici). Despite the increase in organizational resources devoted to EEO cases, therefore, the average plaintiff is more likely to be proceeding on his or her own in the 1980s than he or she was earlier.

In general, the trend has been the same for all groups—the proportion of cases involving federal amici or class action has declined, while the proportion involving nonfederal amici has remained constant (i.e., there are no three-way interactions of basis and administration with federal amici, nonfederal amici, and class actions; it must also be noted that the percentages for the Johnson administration have to be viewed especially cautiously because the numbers involved are small). The story is a bit different for the participation of the federal government as a party, however. Here the three-way interaction among basis, administration, and federal involvement is statistically significant. No particular cell parameter reaches statistical significance, but the most notable changes in table 3 may be the decline of federal participation over time in race-discrimination cases and other combination cases. Perhaps the federal government focused special efforts in the early years on race-discrimination cases and major "pattern or practice" cases, as some scholars have surmised (see Freeman 1975; O'Connor and Epstein 1982) but has shifted its focus in recent years.

The data lead to four especially important conclusions about the organization of EEO cases. First, collective action is very common at the appellate level. Second, groups must rely primarily on themselves for help and only secondarily on the federal government; nonfederal organizations help infrequently. Third, the number of cases involving collective action has continued to grow (including those involving federal participation) under the Reagan administration, but total cases have grown even faster, so EEO plaintiffs increasingly proceed on their own. And fourth, even beyond the fact that most complaints involve race or sex discrimination, a disproportionate share of the resources devoted to the struggle for EEO is used to attack discrimination on the basis of race and sex.

Is all this collective action associated with plaintiff victory? Does it make more difference for some groups than others? And has the relationship between collective action and victory changed over time?

The relationship of organizational mobilization, basis, and administration to victory is described in table 4. Plaintiffs are much more likely to win when the federal government is a party than when it is not—74% of the time as opposed to 54% (statistically significant at less than .001). In table 4, part A, the positive numbers are for those bases and periods

TABLE 4
ORGANIZATIONAL MOBILIZATION AND PLAINTIFF VICTORY (%)

Base	Johnson	Nixon	Carter	Reagan
A. Plaintiffs' success when federal government was party, compared with cases when it was not:				
Race.. .. .	33	24	3	18
Sex	-80	21	6	6
National origin		52	31	52
Religion		-44	42	82
Race and sex		46	39	7
Other combination		6	-3	13
All groups	28	24	11	13
B. Plaintiffs' success with federal amicus on the side alleging discrimination, compared with cases without				
Race	-26	9	31	22
Sex	-100	7	8	28
National origin		-8	6	50
Religion		-3	0	..
Race and sex		7	22	10
Other combination		25	5	-17
All groups	-32	6	15	21
C. Plaintiffs' success with nonfederal amicus on the side alleging discrimination, compared with cases without.				
Race.. .. .		1	2	12
Sex	100	9	2	15
National origin		-60	-20	-56
Religion		-12	42	..
Race and sex.. . . .		44	48	25
Other combination		-30	41	15
All groups	29	-1	4	13
D. Plaintiffs' success in class actions, compared with other cases				
Race.. .. .	21	17	14	13
Sex	50	23	9	11
National origin		-25	-4	13
Religion		60	42	-27
Race and sex		12	27	16
Other combination		29	16	16
All groups	30	20	11	13

NOTE — Ellipses indicate that there were no cases

in which plaintiffs are more likely to win when the federal government is a party than when it is not. Thus, for example, the number 33 in the upper left cell is derived by subtracting the 67% of race cases won during the Johnson administration when the federal government was not a party from the 100% of cases won when it was. Negative numbers mean association with a federal party is linked to a reduced likelihood of victory,

and ellipses mean that there were no cases on which a comparison could be based.

We see in part A of table 4 that groups associated with a federal party do better during almost all periods, as predicted in previous work (Handler 1978, chaps. 4 and 6). Log-linear analysis shows that gaining federal help as a party helps all groups roughly equally, and its effect has remained constant over time (the four-way interaction among all variables is not statistically significant at .05, and there are no statistically significant three-way interactions with the likelihood of victory).

We cannot be sure, of course, that federal participation was the cause of victory.⁵ Nevertheless, when trying to understand why plaintiffs in cases involving national origin and religion are less likely to win than others, it is worth knowing that federal participation is associated with victory for all groups. What distinguishes cases involving national origin and religion from others is the fact that the federal government is a party significantly less often (see table 3, pt. A).

Federal amici and class actions are also associated with plaintiff victory. Seventy percent of cases with federal amici (present in 8.4% of all cases) lead to plaintiff victory, compared with 56% of cases without; 66% of class actions (which constituted 45% of all cases) lead to plaintiff victory as compared with 50% of cases involving individuals or small groups (both significant at less than .001). Participation by nonfederal amici is also associated with victory, but the numbers of cases are so small that the relationship is not statistically significant ($P = .24$). These relationships hold for all groups and time periods.

Thus, federal participation and class actions are associated with plaintiff victory. Differences among protected groups in the likelihood of victory are associated with differential participation in collective action, not differential effectiveness of whatever collective action there is. Cases with multiple bases for the complaint (race and sex, race and national origin, etc.) are the most likely to involve collective action and the most likely to lead to plaintiff victory; race and sex cases are next in both categories; and national origin and religion cases are least likely to involve collective action and least likely to lead to victory. The data provide some basis for arguing that organizational resources have been concentrated on ending discrimination against the most victimized groups—blacks and women—and that this concentration of resources has had the intended effect

⁵ For example, federal attorneys might choose to pursue only especially strong cases. The federal government is more likely to lose than nonfederal parties, however, when it is a defendant. This suggests that the findings are probably not simply the consequence of federal attorneys' choosing cases that will be easy to win (see Eisenberg 1988).

of increasing the number of victories such groups win. But it may be that there has been a price to be paid by national-origin and religious minorities.⁶

CONCLUSIONS

In this article, I have analyzed the mobilization of EEO laws in the context of work on social movements. I have shown that the mobilization of EEO laws has increased since the mid-1960s, that collective action has become more frequent, that collective action is associated with victory, that there are some significant differences among protected groups, with blacks most central to the struggle for EEO and women's cases gaining in importance, and that there has been no dramatic decline in the help available to EEO plaintiffs or in their likelihood of victory.

I have argued that it is useful to analyze legal mobilization as a social movement tactic—the pursuit of movement goals through one sort of proper channel. Analysis of one aspect of the mobilization of EEO laws—federal appellate court cases—leads to some conclusions very much in keeping with recent work on social movements. They are that the relationship between grievances and mobilization is problematic, that blacks remain central to the struggle for equality in the United States, that resources matter for challengers of the status quo, and that the federal government may be extremely important when it chooses to intervene on the side of women and minorities. I have also tried to demonstrate that legal mobilization can be gauged quantitatively in ways similar to those employed to examine actions more often seen as associated with social movements; in fact, it could be worthwhile to link the time-series data collected for this paper with that gathered by others tracing the rise and decline of other forms of movement activity (e.g., McAdam 1983; Jenkins and Eckert 1986).

From the point of view of studies of legal change, Galanter (1983) has observed that there is much speculation but little knowledge about many important issues, and when data on case populations are brought to bear,

⁶ For those involved in EEO suits, the penalties imposed on discriminators will often be of great concern; victory may mean little if only token penalties are imposed. Space limitations preclude a detailed analysis of penalties, but three points are worth making. First, just under a third of penalties imposed required employers to both change practices and compensate individual victims, just over half required compensation only, and the remainder required only changes in practices. An increasing proportion of penalties require only compensation of victims. Blacks are more likely to win changes in practices than members of other groups, this may indicate that judges see the elimination of racial discrimination as requiring more fundamental changes in personnel practices than the elimination of other types of discrimination might require.

many of the speculations prove to be wrong. If more social scientists and lawyers were to analyze populations of cases in the ways suggested here, they could begin to put speculation to rest. In addition, as we have seen, their answers to some questions would raise other questions in turn—for EEO, for instance, there would be questions about why some groups get more help than others and win more often and why some phenomena (such as the proportion of victories) change so little and others so much. Such a reorientation of thinking in the study of law would improve our understanding of the legal system and our ability to relate what happens there to other institutions in the larger society.

More broadly, the article is intended to contribute to narrowing a gap almost as broad now as when Jo Freeman wrote (1975, p. 4) that "the study of social movements and that of public policy are two fields that have heretofore been treated primarily as distinct and unrelated areas in the scholarly literature." Despite the recent upsurge of interest in the state among sociologists, including those who study social movements, most of their effort is still devoted to the study of outsider tactics and relatively little to government institutions, particularly legal institutions. Yet, as Freeman pointed out (1975, p. 2), "political change does not involve isolated efforts either within or without the system. . . . Rather it involves a dynamic system of reciprocal influences whose effects are determined by their mutual relationships." McAdam is right when he writes (1983, p. 752) that, "to succeed over time, then, a challenger must continue its search for new and effective tactical forms," but I claim he is wrong when he goes on to say that "with the abandonment of the riots in the late 1960s, insurgents were left without the tactical vehicles needed to sustain the movement. . . . By decades end the movement had not so much died as been rendered tactically impotent." He should have considered the possibility that part of the movement was able to innovate by turning to legal channels and developing new approaches to legal doctrine. Here I would agree with Jenkins and Eckert, whose view seems more in line with Freeman's when they write (1986, p. 827) that, "as the women's and environmental movements have demonstrated, litigation, close monitoring of government agencies and professional lobbying can be quite effective if allied with an indigenous movement and if there is a clear statutory and administrative basis for implementation."

In trying to bridge the gap between the study of social movements and that of public policy, I have presented data that implicitly raise a number of questions about the struggle for equal opportunity in the United States. Why do EEO complaints and cases continue to increase in number? Why is the federal government so important and why are nonfederal organizations so rarely participants in EEO cases? Why do national-origin and religious minorities seem to have greater difficulty winning

their cases than blacks or women (an issue of potentially great significance as the number of Hispanics, Muslims, and other groups increases)? And, not least, how might we explain the unexpectedly high rate of victory for black and female plaintiffs? Questions may also be raised about the relationship between legal mobilization and the substantive content of the judicial decisions and between what the judges say and what actually occurs in the workplace. To the extent that these questions are taken seriously, I will have succeeded in bringing social movements and the mobilization of law together in this article.

REFERENCES

- Barkan, Steven E. 1984. "Legal Control of the Southern Civil Rights Movement." *American Sociological Review* 49:552-66.
- Belton, Robert. 1981. "Discrimination and Affirmative Action." *North Carolina Law Review* 59:531-98.
- Bergmann, Barbara R. 1986. *The Economic Emergence of Women*. New York: Basic.
- Black, Donald J. 1973. "The Mobilization of Law." *Journal of Legal Studies* 11:125-49.
- Blau, Peter, and Otis Dudley Duncan. 1967. *The American Occupational Structure*. New York: Wiley.
- Blumrosen, Alfred. 1984. "The Law Transmission System and the Southern Jurisprudence of Employment Discrimination." *Industrial Relations Law Review* 6:313-52.
- Bureau of National Affairs. 1969-86. *Fair Employment Practice Cases*, vols. 1-36. Washington, D.C.: Bureau of National Affairs.
- Burstein, Paul. 1985. *Discrimination, Jobs, and Politics*. Chicago: University of Chicago Press.
- . 1988. *EEO Appellate Court Decision Data (MRDF)*. Available from the author, Department of Sociology, University of Washington, Seattle.
- . 1989. "Attacking Sex Discrimination in the Labor Market." *Social Forces* 67:641-65.
- . 1991. "'Reverse Discrimination' Cases in the Federal Courts: Legal Mobilization by a Countermovement." *Sociological Quarterly* 32 (November), in press.
- Burstein, Paul, and Kathleen Monaghan. 1986. "Equal Employment Opportunity and the Mobilization of Law." *Law and Society Review* 20:355-88.
- Cain, Glen G. 1986. "The Economic Analysis of Labor Market Discrimination." Pp 693-785 in *The Handbook of Labor Economics*, vol. 1. Edited by Orley Ashenfelter and Richard Layard. Amsterdam: Elsevier.
- Collins, Randall. 1979. *The Credential Society*. New York: Academic Press.
- DiPrete, Thomas A., and Whitman T. Soule. 1986. "The Organization of Career Lines." *American Sociological Review* 51:295-309.
- Donohue, John J., and Peter Siegelman. 1989. "The Changing Nature of Employment Discrimination Litigation." Paper presented at the annual meeting of the Law and Society Association, Madison, Wisconsin.
- Eisenberg, Theodore. 1988. "Litigation Models and Trial Outcomes in Civil Rights and Prisoner Cases." Unpublished manuscript. Cornell University, Law School.
- Eisenberg, Theodore, and Stewart Schwab. 1987. "The Reality of Constitutional Tort Litigation." *Cornell Law Review* 72:641-93.
- England, Paula, and George Farkas. 1986. *Households, Employment, and Gender*. New York: Aldine.

- Freeman, Jo 1975 *The Politics of Women's Liberation*. New York: Longman
- Galanter, Marc. 1974 "Why the 'Haves' Come Out Ahead." *Law and Society Review* 9:95-160
- . 1983. "Reading the Landscape of Disputes." *UCLA Law Review* 31:4-71.
- . 1990 "Case Congregations and Their Careers." *Law and Society Review* 24:370-95.
- Gamson, William A. 1975 *The Strategy of Social Protest*. Homewood, Ill.: Dorsey.
- Glazer, Nathan. 1978. *Affirmative Discrimination*. New York: Basic.
- Gunther, Gerald. 1975 *Constitutional Law: Cases and Materials*. Mineola, N.Y.: Foundation
- Handler, Joel. 1978. *Social Movements and the Legal System*. New York: Academic.
- Harding, Susan. 1984 "Reconstructing Order through Action: Jim Crow and the Southern Civil Rights Movement." Pp. 378-402 in *Statemaking and Social Movements*, edited by Charles Bright and Susan Harding. Ann Arbor: University of Michigan Press
- Howard, J. W. 1981 *Courts of Appeals in the Federal Judicial System*. Princeton, N.J.: Princeton University Press
- Jenkins, J. Craig. 1983 "Resource Mobilization Theory and the Study of Social Movements." *Annual Review of Sociology* 9:527-53.
- Jenkins, J. Craig, and Craig M. Eckert. 1986. "Channeling Black Insurgency." *American Sociological Review* 51:812-29.
- Johnson, Charles A. 1987 "Content-Analytic Techniques and Judicial Research." *American Politics Quarterly* 15:169-97
- Keotahian, A. 1986 "National Origin Discrimination in Employment—Do Plaintiffs Ever Win?" *Employee Relations Law Journal* 11:467-92
- Kuhn, Peter. 1987 "Sex Discrimination in Labor Markets: The Role of Statistical Evidence." *American Economic Review* 77:567-83.
- Lempert, Richard, and Joseph Sanders. 1986. *An Invitation to Law and Social Science*. New York: Longman.
- Lieberman, Stanley. 1980. *A Piece of the Pie*. Berkeley and Los Angeles: University of California Press.
- Martin, Douglas. 1988 "The Rise and Fall of the Class Action Lawsuit." *New York Times* (national ed.), January 8.
- McAdam, Doug. 1983 "Tactical Innovation and the Pace of Insurgency." *American Sociological Review* 48:735-54.
- McCarthy, John, and Mayer Zald. 1977 "Resource Mobilization and Social Movements." *American Journal of Sociology* 82:1212-41
- Morris, Aldon. 1984. *The Origins of the Civil Rights Movement*. New York: Free Press.
- Norusis, Marija. 1986. *SPSS/PC+ for the IBM PC: Advanced Statistics*. Chicago: SPSS
- O'Connor, Karen, and Lee Epstein. 1982 "The Importance of Interest Group Involvement in Employment Discrimination Litigation." *Howard Law Journal* 25:709-29.
- . 1983. "Sex and the Supreme Court: An Analysis of Judicial Support for Gender-based Claims." *Social Science Quarterly* 64:327-31
- Pole, J. R. 1978. *The Pursuit of Equality in American History*. Berkeley: University of California Press
- Priest, George. 1980 "Selective Characteristics of Litigation." *Journal of Legal Studies* 9:399-421
- Priest, George, and Benjamin Klein. 1984 "The Selection of Disputes for Litigation." *Journal of Legal Studies* 13:1-55.
- Sabatier, Paul. 1975. "Social Movements and Regulatory Agencies." *Policy Sciences* 6:301-42.

- Schlei, Barbara Lindemann, and Paul Grossman. 1983. *Employment Discrimination Law*, 2d ed. Washington, D.C.: Bureau of National Affairs.
- Snow, David A., E. Burke Rochford, Jr., Steven K. Worden, and Robert Benford. 1986. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review* 51:464-81.
- Stidham, Ronald, Robert Carp, and C. K. Rowland. 1983. "Women's Rights before the Federal District Courts, 1971-77." *American Politics Quarterly* 11 205-18.
- Stinchcombe, Arthur. 1978. *Theoretical Methods in Social History*. New York: Academic Press.
- Tilly, Charles. 1978. *From Mobilization to Revolution*. Reading, Mass.: Addison-Wesley.
- . 1984. "Social Movements and National Politics." Pp. 297-317 in *Statemaking and Social Movements*, edited by Charles Bright and Susan Harding. Ann Arbor: University of Michigan Press.
- Wheeler, Stanton, Bliss Cartwright, Robert A. Kagan, and Lawrence M. Friedman. 1987. "Do the Haves Come Out Ahead? Winning and Losing in State Supreme Courts, 1870-1970." *Law and Society Review* 21:403-46.
- Zemans, Frances Kahn. 1983. "Legal Mobilization: The Neglected Role of the Law in the Political System." *American Political Science Review* 77:690-703.

The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing¹

Jonathan Crane

University of Illinois at Chicago

Why are the social problems of ghettos so bad? This article proposes that ghettos are communities that have experienced epidemics of social problems. One important implication of this theory is that the pattern of neighborhood effects on social problems should be nonlinear in large cities. As neighborhood quality decreases, there should be a sharp increase in the probability that an individual will develop a social problem. The jump should occur somewhere near the bottom of the distribution of neighborhood quality. This hypothesis is tested by analyzing the pattern of neighborhood effects on dropping out and teenage childbearing. The analysis strongly supports the hypothesis, with exceptions for certain subgroups. Even after controlling for individual characteristics, black and white adolescents are exposed to sharp increases in the risk of dropping out and having a child in the worst neighborhoods in large cities.

I. THE EPIDEMIC THEORY OF GHETTOS

The word "epidemic" is commonly used to describe the high incidence of social problems in ghettos. The news is filled with feature stories on "crack epidemics," "epidemics of gang violence," and "epidemics of teenage childbearing." The term is used loosely in popular parlance but

¹ I wish to thank David T. Ellwood, Christopher Jencks, Mary Jo Bane, Naomi Goldstein, Lisa Whittlemore, Glenn Loury, and Lee Rainwater for their invaluable advice and helpful comments on earlier drafts. The data utilized in this paper were made available in part by the Inter-university Consortium for Political and Social Research. The data for the Public Use Samples of basic records from the 1970 census were originally collected by the U.S. Department of Commerce, Bureau of the Census. Neither the collector of the original data nor the consortium bears any responsibility for the analyses or interpretations presented here. Requests for reprints should be addressed to Jonathan Crane, University of Illinois at Chicago, Institute for Government and Public Affairs, 921 West Van Buren, Chicago, Illinois 60607.

turns out to be remarkably apt. In fact, I propose that ghettos are neighborhoods that have experienced epidemics of social problems.

In my earlier work (Crane 1989) I used a mathematical model designed to describe the spread of infectious diseases in order to characterize how social problems spread. This "contagion model" is essentially a more general version of Schelling's (1971; 1978, pp. 101–10) well-known "tipping model," which was formalized by Granovetter (1978) and Granovetter and Soong (1983).²

The basic assumption of my model is that social problems are contagious and are spread through peer influence. The large body of empirical work on delinquency and differential association supports this assumption, at least for several types of adolescent social problems (e.g., Kandel 1980).³

The key implication of the contagion model is that there may be critical levels of incidence of social problems in populations. The incidence of problems tends to move toward equilibrium levels. If the incidence stays below a critical point, the frequency or prevalence of the problem tends to gravitate toward some relatively low-level equilibrium. But if the incidence reaches a critical point, the process of spread will explode. In other words, an epidemic may occur, raising the incidence to an equilibrium at a much higher level.⁴

Two basic conditions determine a community's susceptibility to epidemics: (1) the residents' risks of developing social problems and (2) their susceptibility to peer influence. Steinberg (1987) found that children from single-parent homes are more susceptible to peer pressure to engage in antisocial behavior. Liebow (1967), Fischer (1977), and MacLeod (1987) found that poor urban males of various ages often develop strong peer subcultures that value behaviors that generate social problems. Adoles-

² Schelling (1978) used the term "critical mass model" to describe his finding that examples with multiple equilibria exhibit critical mass properties. Granovetter (1978) used the term "threshold model" because an important assumption is that individuals will develop a certain behavior when the proportion of the relevant population engaging in that behavior reaches a particular threshold. However, I prefer the term "contagion model" to emphasize the medical analogy, which I have found provides a quick intuitive understanding of the model.

³ Social problems may also be contagious among children and adults, but the mechanisms by which they spread might be different. For example, the parent-child relationship may be relatively more important for children than for teenagers. Adults may influence each other less directly through social norms. The analysis here is confined to adolescents because of limitations of the data, described below.

⁴ Similar kinds of epidemic results can be generated by a number of different models with different mathematical approaches. All of these models fall under the general rubric of catastrophe theory. For examples of alternative approaches that could be applied to this problem, see Varaiya and Wiseman (1984).

cent street gangs are a good example of this. (Recent media reports of a sudden explosion of gang membership in Los Angeles suggest that there may have been an epidemic of joining there.) Rainwater (1970) found that poor black teenage females often begin having sex because it is valued as a sign of maturity in their peer group, despite the fact that few have an "autonomous interest" in it.

Thus, we would expect epidemics of social problems to be most common in poor, minority neighborhoods, particularly in cities. But not all such neighborhoods experience epidemics; ghettos are the ones that do.⁵ Poor neighborhoods that do not become ghettos have higher than average rates of social problems, but they do not experience the epidemic interaction that generates a whole much greater than the sum of its parts.

This theory of epidemics implies that the pattern of incidence of a particular social problem in the neighborhoods of a city should take a specific form. There should be two separate distributions.⁶ One should include all the neighborhoods that have not experienced an epidemic of the problem. Poor neighborhoods should be concentrated at the high end of this distribution, but still at a much lower level than the low end of the second distribution. The second distribution, much smaller than the first, should include all the ghetto neighborhoods. I have used this implication to test the theory and found that various indices of juvenile delinquency in Chicago and murder rates in Los Angeles conformed to this pattern (Crane 1989).

Another testable implication of the theory is that neighborhood effects on social problems should follow a very specific form. The relationships between neighborhood quality and the incidence of particular social problems should be nonlinear. Social problems should increase as neighborhood quality declines, but not at a constant rate. Somewhere near the bottom of the distribution of neighborhood quality, there should be a jump in the rate of increase. This is because the prevalence of problems should be much higher in those neighborhoods that have experienced an epidemic than in those that have not. Thus, the epidemic theory implies that there are very strong neighborhood effects at at least one point near the bottom of the distribution of neighborhood quality.

This pattern of neighborhood effects enables us to distinguish the epidemic hypothesis from other theories. Jencks and Mayer (1990) organize

⁵ In everyday usage, the term "ghetto" sometimes refers to any poor and/or ethnically homogeneous neighborhood. But here I apply its other usage, which refers specifically to "bad" neighborhoods, i.e., those rife with social problems. There are at least two synonyms that share this meaning, but "slum" seems to have gone out of use and "underclass neighborhood" (Ricketts and Sawhill 1988) is not yet widely used.

⁶ If we take into account dynamic aspects of the contagion process, it could also be a single bimodal distribution (Crane 1989). But the basic idea is the same.

theories of neighborhood effects into four general categories. (1) Contagion theories (of which the epidemic theory is one example) focus on peer influence as the mechanism of neighborhood effects. (2) Collective socialization theories argue that adults in the neighborhood serve as role models and sources of social control. (3) Institutional theories emphasize the role that schools, businesses, political organizations, social service agencies, and the police play in the community. (4) Social competition theories see neighbors as competitors for scarce resources.

The first three theories imply that bad neighborhoods increase social problems, while the fourth predicts that good neighborhoods increase them. Some versions of the first three predict that social problems increase at an accelerating rate as neighborhood quality declines. But the acceleration is smooth and steady. None of them, except the epidemic version of the contagion theory, imply an extremely large and very sharp increase in the incidence of social problems. It is not that the others are inherently inconsistent with the existence of such a pattern. It is just that they do not explain it. Each of these other theories needs some kind of intermediate mechanism with critical mass-type properties embedded within it to account for a large jump. The epidemic process could provide that intermediate mechanism.

To say that the existence of this pattern of neighborhood effects would thus prove the epidemic theory is certainly going too far. There may be other mechanisms that could generate a critical mass phenomenon in social problems. But, in the absence of alternatives, determining whether or not there is an extremely large and very sharp increase in social problems at the bottom of the distribution of neighborhood quality is a sufficient test of the epidemic hypothesis.

In the following sections, neighborhood effects on dropping out of high school and teenage childbearing are analyzed to determine whether there was such a large jump in the incidence of these social problems in the worst neighborhoods of large cities and in other areas as well.

II. THE LITERATURE ON NEIGHBORHOOD EFFECTS

In their comprehensive literature review, Jencks and Mayer (1990) found that strong conclusions about the existence and strength of neighborhood effects could not be drawn from the existing body of empirical work. There are a number of reasons for this, but the main one is simply that the literature is extremely small.⁷ While there is no need to repeat their

⁷ There is, however, a large literature on the effects of the social composition of schools (Jencks and Mayer 1990). The relationship between neighborhood effects and school effects is discussed in Sec. V below.

review, the studies of neighborhood effects on the two outcomes examined here can be summarized briefly.

Datcher (1982) used the Panel Study of Income Dynamics (PSID) to do a longitudinal study of urban males, aged 13–22, who lived with their parents in 1968. She used zip codes to create geographical boundaries and then examined the effect that area-averaged income had on individual education attainment in 1978. She controlled for parents' educational attainment and income, family size, region, community size, age, and the head of household's educational aspirations for his or her children. She found that an increase of \$1,000 (10%) in zip code–area income raised the educational attainment of the men by approximately one-tenth of a school year for both blacks and whites.

Corcoran et al. (1987) expanded Datcher's analysis. They looked at all the individuals in the PSID who were between the ages of 10 and 17 in 1968. They examined the effects of four different 1968 zip code–area characteristics (median income, percentage of female-headed homes, male unemployment rate, percentage of people receiving public assistance) on the individual educational attainment in 1983. They controlled for race, region, city size, religion, family structure, family income in 1968, welfare receipt, the educational attainment of the head of household and spouse, and the work hours of the head of household and spouse.

For men, a 2-SD increase (eight percentage points) in the proportion of female-headed families in the zip code area decreased educational attainment by about one-fourth of a year. A 2-SD increase (10 percentage points) in the welfare-receipt rate reduced schooling by about half a year. Neither median income nor the male unemployment rate had an effect. For women, a 2-SD increase in the male unemployment rate of the zip code area decreased attainment by about half a year, a 2-SD increase in the proportion of female-headed families reduced schooling by about one-fourth of a year, and a 2-SD increase in the welfare-receipt rate lowered attainment by a little less than half a year. Median income had no effect.

There are no studies of neighborhood effects on teenage childbearing *per se*, but there is one each on pregnancy and contraception. Hogan and Kitagawa (1985) looked at Chicago census tracts to construct a 1979 sample of unmarried black females between the ages of 13 and 19. They used two different measures of neighborhood effects. In one, they constructed a composite measure of neighborhood quality using the tracts' poverty rate, median family income, male-female ratio, number of children per ever-married female, and several indices of juvenile delinquency among teenage males. They divided the tracts into three groups: the top quarter, the middle half, and the bottom quarter. The second neighborhood variable was a dummy indicating whether the female lived in the

West Side ghetto. They controlled for social class, parents' marital status, and number of siblings.

Hogan and Kitagawa (1985) found no significant difference in teen pregnancy rates between the high-quality neighborhoods and middle-quality neighborhoods. But the chances of becoming pregnant in a given month were a little more than a third higher in the low-quality neighborhoods. Living on the West Side increased pregnancy risk by almost two-fifths. Since two measures at very different geographic levels were used, the overall neighborhood effect cannot be determined precisely. It was probably larger than the effect of either one alone but less than the sum of both.

Using the same data set, Hogan, Astone, and Kitagawa (1985) examined the practice of contraception among black females in Chicago. They found that females in low-quality neighborhoods were about half as likely as those in better neighborhoods to use contraception when they first had sex.

In short, what little evidence we have suggests that neighborhood effects on educational attainment are quite small, while neighborhood effects on pregnancy are quite large. It is possible, however, that the two studies of educational attainment underestimated neighborhood effects because zip code areas are poor proxies for neighborhoods. Zip code areas are probably larger than most neighborhoods, and they are not designed to be socioeconomically or ethnically homogeneous. Zip code-area estimates might be biased downward by a large amount because the error in measuring neighborhoods introduces randomness.⁸

III. METHODOLOGY

One reason that so little work has been done on neighborhood effects is that there are so few data sets that provide information on both individuals and their neighborhoods. However, there is one extremely valuable data set that has gone virtually untouched, although it has been around for almost two decades. In 1970, the Census Bureau defined a geographic unit called a neighborhood and made data on individuals' neighborhoods publicly available in one of its Public Use Microdata Samples (PUMS). The neighborhoods themselves were not identified, but the values of 55 neighborhood indices were attached to individuals' records. Since this data set is nonlongitudinal, it has certain methodological weaknesses.

⁸ Of course, it is also true that estimates of neighborhood effects in all three studies may have been biased in either direction for a number of other reasons. In Sec. V below, the potential sources of bias in the analysis done here are discussed, and most of them apply to these three studies as well.

However, its enormous size (over 2 million individuals) gives it some unique and extremely important advantages. In particular, it enables us to examine neighborhood effects on small subgroups, such as those living in urban ghettos.

In the following analysis, I examine the effects of neighborhood quality on dropping out and teenage childbearing. The data were drawn from the 1/100, 15% Neighborhood Characteristic File of the PUMS. These so-called neighborhoods were specially designed for this version of the PUMS. They were about the same size as census tracts, averaging 4,000–5,000 people. They were formed by computer, using geographic keys associated with each household record. They were normally contiguous and relatively compact. However, socioeconomic and demographic data were not used to define them (U.S. Bureau of the Census 1973). So, despite the nomenclature, these geographic units were not necessarily neighborhoods in any meaningful social sense.

I examined only teenagers living with their parents, because social problems almost certainly affected both the probability of moving out of their parent's home and the quality of the neighborhood into which they moved. In a model that assumed one-way causality and made no adjustment for this simultaneity effect, estimates of neighborhood effects would probably be biased upward.⁹ No instrument could be found to distinguish the effects in each direction, so it was not possible to specify a simultaneous equation model. Teenagers were also excluded on the basis of two data-cleaning criteria. Those with inconsistencies in their records were left out. And individuals with certain allocated values for the outcome variables were omitted.¹⁰

There were a total of 113,997 16–19-year-olds (56,233 females) in the 1970 PUMS. After the various exclusions, the study samples consisted of 92,512 teenagers for the analysis of dropping out of high school and 44,466 females for the childbearing analysis. The ramifications of the exclusions are discussed in Section V below.

Recall that the epidemic theory of ghettos implies that there should be a sharp increase in the incidence of social problems among the worst neighborhoods in large cities. To determine whether there was such a

⁹ This is also the reason this study focuses exclusively on teenagers. The simultaneity problem applies to all adults, so without longitudinal data or an identifying instrument, any estimates of neighborhood effects on their social problems are likely to be biased upward. The problem does not apply to children, but there was no information on their social problems in the data set.

¹⁰ If a question is left unanswered or the response is ambiguous, the Census Bureau may allocate a response in the PUMS. One method of allocation was to substitute the response of the previous person of the same type. Those with dropout and childbearing responses allocated in this way were excluded.

jump in dropping out or childbearing, a piecewise linear logit model (Amemiya 1981) is used to estimate the pattern of neighborhood effects across the distribution of neighborhood quality. A large increase in the slope from one piece to the next would indicate a precipitous rise in these problems at a particular point in the neighborhood distribution.

In the model, the reduced-form equation for the probability that individual i drops out (or has a child), P_{Di} , is:

$$P_{Di} = \frac{1}{1 + e^{(\alpha + X_i\beta + N_{ij}\gamma_j)}} \quad (1)$$

where X_i is a vector of personal characteristics; β is a vector of coefficients; N_{ij} is a vector indicating neighborhood quality for each individual i within a particular interval j of the neighborhood quality distribution; γ_j is a vector of coefficients indicating the neighborhood effect of each interval j of the distribution; and α is an intercept. The parameters α , β , and γ_j are generated by maximum-likelihood estimates.

For blacks and Hispanics, the neighborhood quality distribution is divided into seven intervals. A percentile scale is used to establish boundaries for the intervals.¹¹ For example, the bottom group includes the 5% of the black population living in the worst neighborhoods. In ascending order, the intervals are percentiles 0-5, 6-10, 11-25, 26-50, 51-75, 76-90, and 91-100. The same intervals are used for whites. But an eighth one is added, 0-.1, for the purpose of comparison, in the same range of the bottom interval for blacks. In other words, just .1% of white teenagers lived in neighborhoods as bad as those inhabited by 5% of black teens.

The index of neighborhood quality used in the models estimated below is the percentage of workers in the neighborhood who held professional or managerial jobs (%HIGH STATUS). It was chosen because it had a larger effect on both dropping out and childbearing than any of 15 other indices,¹² as well as several composites. Also, it dominated all of these other indices when they were run together in various combinations. And

¹¹ Approximations were necessary because the raw data were provided in discrete form.

¹² The 15 other measures were the poverty rate, the family poverty rate, the median income, the unemployment rate, the male labor-force participation rate, the female labor-force participation rate, the proportion of female-headed families, the percentage of the population that was black, the percentage of the population that was Hispanic, the proportion of the population between the ages of 16 and 21, the median level of educational attainment, the proportion of adults who had completed less than eight years of school, the proportion of families who had moved within the last five years, the proportion of households with more than one person per room, and a Gini coefficient of income distribution.

%HIGH STATUS alone explained almost as large a proportion of the variation in each outcome variable as did all 16 of the indices combined. (A two-way correlation matrix showing the relationship between 10 of these indices is presented in table A1 in the Appendix.)

Just why %HIGH STATUS had the strongest effects is not entirely clear. It could be that if kids see a lot of role models for traditional success in their neighborhood, it gives them more incentive to stay in school and avoid having children. Or it may be that high-status people use their affluence and influence in wider society to bring into the neighborhood resources that make local institutions and services better.

While these hypotheses are probably valid to some extent, my guess is that, for the most part, the relationship reflects a selection process. Affluent people can live wherever they want to. They choose to live in good neighborhoods. If few affluent individuals are around, it is probably because the neighborhood is undesirable. This hypothesis is essentially predicated on the assumption that individuals can gain better information about neighborhood quality in their everyday lives than can social scientists with statistical instruments.

The control variables were chosen largely on the basis of previous empirical work. There is a fairly large literature on the determinants of educational attainment. Parents' educational attainment, family income, and father's occupational status are important factors (Corcoran et al. 1987; Sewell, Hauser, and Wolf 1980; Jencks et al. 1972); cognitive ability, academic achievement, attitudes, and aspirations also have effects (Sewell et al. 1980; Jencks et al. 1972). Jencks et al. found that race had no effect on educational attainment after controlling for background variables, but Corcoran et al. found a significant black advantage over whites. Sewell et al. found that gender affects the pattern of attainment. They also found that family size, number of parents in the home, rural origin, and maternal employment had indirect effects, but no direct effects, on educational attainment.

Of these variables, eight are available in the 1970 PUMS data set, including family income, parents' educational status, family head's occupational status, household structure, family size, rural origin, gender, and race. The first six were included as controls in the models of dropping out. Gender and race (and also Hispanic ethnicity) are accounted for in the analysis by estimating separate equations for various subgroups. Measures of ability, achievement, attitudes, and aspirations are not available. Place size, region, and residential mobility have been included because it seems plausible that they might have effects. Two other variables included indicate whether the family head was in the military and whether the head lacked a census-designated occupation; in both of those cases their occupational status score was zero.

In general, demographic analyses of the determinants of teen childbearing have tended to yield equivocal results (Hogan and Kitagawa 1985). But Hogan and Kitagawa did find that a composite variable of social class, parents' marital status, the presence of a sister who was a teen mother herself, and parental control of dating had significant effects on the childbearing age of black teenagers in Chicago. Zelnick, Kantner, and Ford (1981) found that the number of parents in the home had a significant effect. For the sake of comparison, and since it seemed plausible that they might have an effect, the same measures of SES and family structure and all the other controls in the models of dropping out were also included in the childbearing models. The one exception was household size, which was excluded because it is endogenous.

IV. RESULTS

Figure 1 shows the effect of changes in the percentage of high-status workers in the neighborhood on the estimated dropout probabilities for black, white, and Hispanic teenagers.¹³ Since the epidemic theory emphasizes the importance of changes at the low end of the distribution, figure 1 and all the figures included below are structured to highlight the effects of decreases in %HIGH STATUS. With vertical axes positioned at the right, the figure is read right to left, from higher percentage to lower ones, and demonstrates the movement from better neighborhoods to worse ones. The confidence intervals of the estimates presented in figure 1 and all other figures below are given in tables A2–A12 in the Appendix. The logit equations that generated the estimates shown in each figure are available from the author.

The estimates of dropout probabilities are calculated for teenagers with average background characteristics for their racial/ethnic group. In other words, the control variables are fixed at their mean levels.

The slope of the line between each set of points indicates the magnitude of the neighborhood effect in that portion of the neighborhood quality distribution. For example, from right to left in the figure, the estimated dropout probability for Hispanics increases from .083 to .121 as the percentage of high-status workers falls from 43.3% to 27%. The slope is $-.0023$. In other words, each one-percentage-point decrease in %HIGH STATUS increases by .0023 the dropout probability of an average Hispanic teenager living in the best neighborhood.

As figure 1 clearly shows, the pattern of neighborhood effects on drop-

¹³ The "white" category contained all individuals who were neither blacks nor Hispanics, including Asians, Native Americans, and other minorities. Since whites constituted such a high percentage of this group, the term "white" is used as a shorthand.

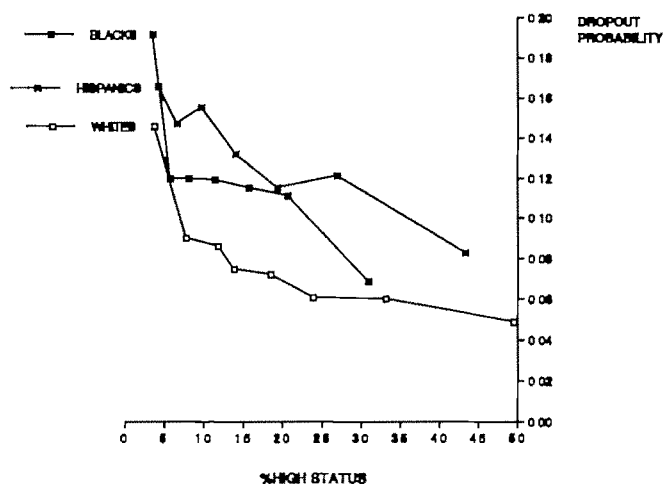


FIG. 1.—Estimated dropout probability as a function of the percentage of high-status workers in the neighborhood for blacks, whites, and Hispanics.

ping out is precisely the one predicted by the epidemic hypothesis for both blacks and whites. In each case, there is a sharp jump in dropout probabilities in the lowest range of %HIGH STATUS. The neighborhood effect is extremely large at the very bottom for both groups. For Hispanics, however, the pattern of neighborhood effects is essentially linear.

The extreme sharpness of the increase can be expressed by the ratio of the slopes around the point where it occurs. For blacks, there is virtually no neighborhood effect in the middle range of the distribution. As the percentage of high-status workers falls from 20.7% to 5.6%, the estimated dropout probability increases from just .111 to .120. The slope of the line fitted to the four observations in this range (using the least squares criterion) is just $-.00065$. But as %HIGH STATUS falls just two more percentage points, to 3.5%, the estimated dropout probability jumps up to .192. The slope at the bottom of the distribution is $-.034$. The ratio of the steep slope to the flat slope is 52.7, a very sharp increase indeed. In other words, the neighborhood effect among the very worst neighborhoods is more than 50 times greater than the effect in the middle. There is also a sharp decrease in the dropout probability at the top of the distribution for blacks. The slope in the range of %HIGH STATUS between the top two points is $-.0041$, more than six times greater than the slope in the middle (though still less than an eighth as large as the slope at the bottom).

Is it likely that the jump resulted from random variation in the estimates? We can address this question by testing a null hypothesis of linear-

ity, that is, that the slope in the middle of the distribution was the true slope for the entire distribution. To do this, I extrapolate from the line fitted to the middle five points by extending it in each direction, down to 3.5% and up to 31%. I then check to see whether the dropout probabilities at these points are significantly different from the extrapolated values. The dropout probability in the worst neighborhoods is significantly higher than the corresponding extrapolated value. But the dropout probability in the best neighborhoods is not significantly lower.¹⁴

For whites, the estimated dropout probability rises from .049 to .090 as the percentage of high-status workers falls from 49.4% to 7.7%. The slope of the line fitted to these seven points is .00095. As the percentage of high-status workers falls from 7.7% to 3.6%, the dropout probability jumps to .146, which is significant under the same hypothesis test described above. The slope between these two points is $-.014$. Thus the neighborhood effect is almost 15 times greater below the key point. Recall that just .1% of white teenagers lived in those very worst neighborhoods. But these results suggest that the ones who did dwell in bad neighborhoods were not immune to epidemics of dropping out.

For Hispanics, the pattern of increase is approximately linear across the whole distribution. The slope of the line fitted to all the observations is $-.002$, so neighborhood effects are fairly large. But there was no sharp jump. However, the validity of these results is open to question because of problems with the definition of Hispanic ethnicity in the 1970 census. Different criteria were used in different regions of the country. If the estimates are actually composites in which the dropout probabilities of very different populations are averaged together, sharp increases within each separate population could be masked. Of course, there is no evidence that this is, in fact, the case.

In order to determine whether these precipitous increases are either concentrated in or confined to urban ghettos, separate equations were estimated for blacks living in the largest cities and those living in other places.¹⁵ Figure 2 shows the patterns of neighborhood effects for the two groups.

There are sharp jumps for both groups. In these cities, there are non-trivial neighborhood effects across the entire distribution. The estimated dropout probability rises from .063 to .145 as the percentage of high-status workers falls from 28.1% to 5%. The slope of the line fitted to

¹⁴ The criterion for significance is the .05 level of a one-tailed test. The value at 31% is significant at the level of .10, but not at .05. The value at 3.5% is significant at .01.

¹⁵ The "largest cities" were central cities of urbanized areas, in which the urbanized area had a population of more than 1 million.

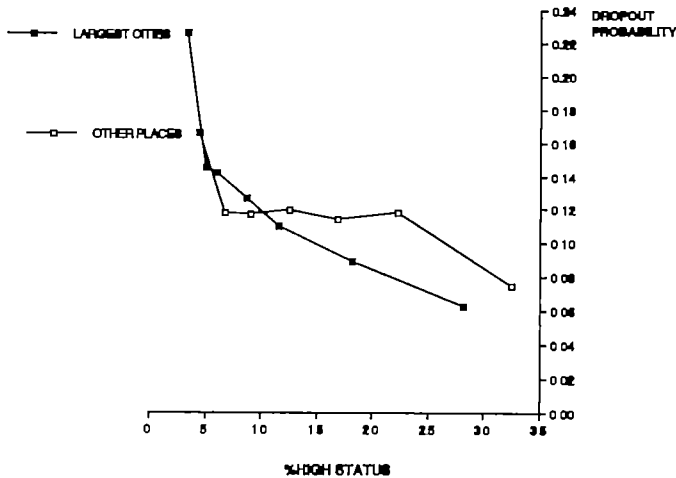


FIG. 2.—Estimated dropout probability as a function of the percentage of high-status workers in the neighborhood for blacks in the largest cities and other places.

these points is $-.0036$. But neighborhood effects are much larger at the very bottom. As %HIGH STATUS falls to 3.4%, the dropout probability leaps to .226, which is significantly greater than the value extrapolated from the fitted line. The slope below the key point is .051, more than 14 times greater than the slope above it.

The increase is even sharper outside the largest cities, but this was because there was virtually no neighborhood effect at all in the center of the distribution. The estimated dropout probability is almost constant around .118, between 22.2% and 9%. As the percentage of high-status workers falls to 4.5%, the probability rises to .116, which is significant. The slope below the key point is .022, over 300 times greater than the slope of the line fitted to the middle five points of the distribution. There is also a sharp decrease at the top of the distribution. The slope in that range is 60 times greater than the slope in the middle. But the estimated dropout probability is not significantly lower than the value extrapolated from the fitted line.

The level, the absolute increase, and the rate of increase in dropout probabilities below the key point are all greater within the largest cities than outside them. So these results suggest that epidemics may have occurred outside large cities but that they were worse in ghettos.

To ensure that these results are not just the result of the arbitrary grouping, several models were also estimated in which progressively smaller cities were included in the large-city category. As expected, the

size of the jump diminishes as more cities are added, but it remains quite large. Equations were also estimated for whites inside and outside of the largest cities. The results were similar to those for blacks. There is a sharp increase at the bottom in each case, but it is significant only in the cities.

While all ghetto teenagers suffer from social problems, recently people have become particularly concerned about males. Separate models were estimated for black males and black females in the largest cities, to see if males were particularly prone to epidemics. Figure 3 shows the results.

There is a dramatic difference in the results, with an enormous increase in estimated dropout probabilities for black males in ghettos. As the percentage of high-status workers falls from just 5.6% to 3.4%, the probability explodes from .146 to .345, which is highly significant. The slope of the line between these two observations is huge, $-.09$. Neighborhood effects are almost 38 times greater below the key point than above it. In marked contrast, the estimated dropout probability actually decreases at the very bottom for black females.

It is possible that these results are accurate and that the special concern about males is more well placed than anyone ever imagined. But it is hard to believe that there could really have been a difference of this magnitude. Models were estimated for black males and females outside the largest cities and for white males and females within them. There are sharp increases at the bottom for all of these groups, and they are about the same size for both sexes in each case. This suggests that one or both of the observations at %HIGH STATUS = 3.4% may be a bad estimate. Random error could be responsible. The upper bound of the 95% confidence interval of the observation for females is .182, while the lower bound of the confidence interval for males is .229. Another possibility is bias. As discussed in Section V below, there is evidence that the observation may be biased downward for females.

There is evidence of epidemics of teenage childbearing too. Figure 4 presents the results for four groups: all black females, black females in the largest cities, all white females, and white females in the largest cities. None of the neighborhood dummies or the control variables are significant in the equation estimated for Hispanic females. This is probably because there are very few of them with children in the study sample (Crane 1989).

For all black females, the estimated probability of having a child rises from .082 to .124 as the percentage of high-status workers in the neighborhood falls from 31.2% to 5.6%. As %HIGH STATUS falls to 3.5%, the probability jumps to .161. The slope below the key point is 13 times greater than the slope above it, but the increase in the childbearing probability is not significant. Separate models were also estimated for black

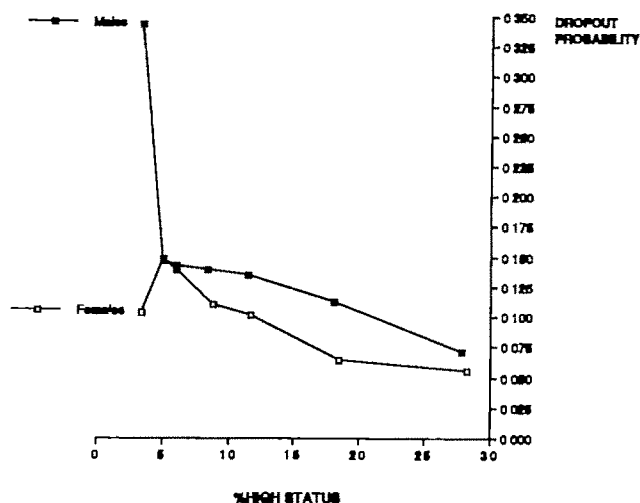


FIG. 3.—Estimated dropout probability as a function of the percentage of high-status workers in the neighborhood for black males and black females in the largest cities.

females in smaller cities, suburbs, towns, and rural areas. There are some nonlinearities, but none of the increases are significant.

For black females in the largest cities, the estimated probability of having a child rises from .074 to .120 as the percentage of high-status workers falls from 31.2% to 6%. As %HIGH STATUS falls to 3.5%, the probability jumps to .198. The sharp increase occurs at the third-to-the-last point rather than the second-to-the-last, as in all the other cases. Since these two observations are so close together, this aberration could have been generated by a small random error in either one. But the basic story is the same either way. The childbearing probability is highest by far in the very worst neighborhoods. Taking the third-to-last observation as the key point, the ratio of the slopes is 16. The increase in childbearing probabilities is significant for the last observation, though not for the second-to-last.

The results are similar for white females. There is a sharp increase at the bottom for all white females. But it is not significant for the group as a whole or for any subgroup outside the largest cities. Within these cities, however, neighborhood effects at the bottom of the distribution are huge. The estimated childbearing probability increases from .001 to .01, as the percentage of high-status workers falls from 46.3% to 7.5%. As %HIGH STATUS falls to 3.5%, the probability explodes to .102, which is easily significant. The slope below the key point is $-.023$,

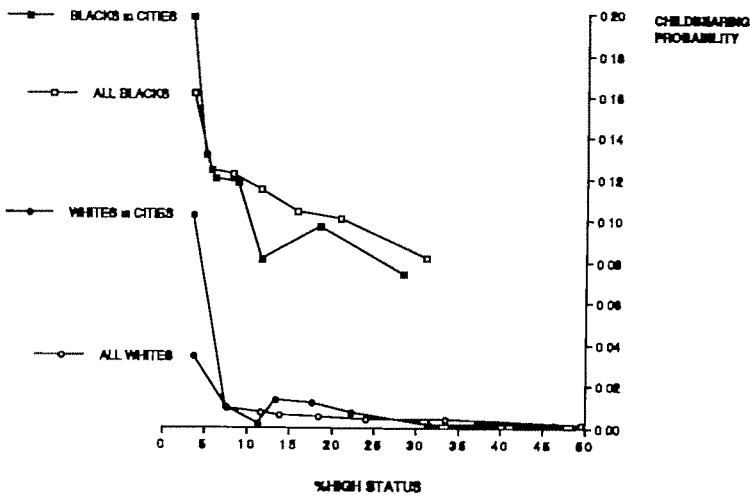


FIG. 4.—Estimated childbearing probability as a function of the percentage of high-status workers in the neighborhood for all blacks, blacks in the largest cities, all whites, and whites in the largest cities.

almost 100 times greater than the slope above it. Those few white females who lived in the worst neighborhoods of the largest cities were more like black females in terms of childbearing than other whites.

The pattern of results found here could be sensitive to the scale of measurement. The choice of scales were not completely arbitrary. The nonlinear pattern of effects in this linear scale suggests that there was a "social effect." If the pattern of effects had been linear, it could be argued that neighborhood effects were generated entirely by the high-status individuals directly and thus were directly proportional to the percentage of individuals in the community. The nonlinear results suggest that neighborhood effects were the product of social interaction, that the whole was greater than the sum of its parts, at least in the worst neighborhoods. Nevertheless, equations scaled in percentiles were also estimated. The results are essentially the same in each case, except that neighborhood effects tend to be a little larger at the very top of the distribution in the percentile scale.

Taken together, these results generally provide strong support for the hypothesis. Neighborhood effects on both dropping out and teenage childbearing were much larger in urban ghettos than anywhere else. Both the sharpness of the increases and the fact that they occur at virtually the same place in each distribution are striking. While any one of these jumps could have been generated by an unusually large random error, it is exceedingly unlikely that there would be so many large random

errors in the same direction at the same point in the distributions. The absence of the pattern among Hispanics is not so troubling, given problems in the way the group was defined in the census. The absence of the pattern among black females in the largest cities is troubling, but that result may be biased.

V. BIAS

There are several different possible sources of bias in estimating neighborhood effects. These include sampling bias, measurement error, specification error, and endogeneity bias. Wherever possible, the analysis was structured so that estimates of both the overall neighborhood effect and the relative size of the effect at the bottom would be biased downward, in order to make these estimates as conservative as possible.

The single most important potential source of bias is the exclusion of certain teenagers from the study sample. Recall that teenagers not living with their parents had to be excluded because the direction of causality could not be identified for them. Individuals with inconsistencies or other problems in their records were also left out. Unfortunately, dropouts and childbearers were disproportionately excluded, and thus the total bias may be very large. Almost half the dropouts and about two-thirds of the childbearers are excluded from the study sample. Fortunately, the net bias is probably downward, especially in the worst neighborhoods. So, the estimates of neighborhood effects are probably conservative.

The estimates are biased if the correlation between the dropout (or childbearing) probabilities and neighborhood is different for the excluded group than for those in the study sample. If the partial correlation is more negative among the excluded teenagers than in the sample, then the estimates are biased downward. If the partial correlation is less negative or positive among the excluded teens, then the estimates are biased upward.

For the group that was excluded in the data-cleaning process, we have information on dropout rates, childbearing rates, and the percentage of high-status workers in the neighborhood, but we do not know how reliable this information is. The dropout and childbearing rates are known for those teenagers who were left out because they lived away from home. But we do not have any information about the neighborhoods they lived in when they dropped out or became pregnant. Their neighborhood at the time of the census may have been a good proxy for those who lived with relatives, but not for those living independently. A substantial proportion of teenagers living on their own probably moved out after (and often because) they left school and/or became pregnant. And the neighborhoods they moved to were almost surely poorer, on average, than the

ones they moved from. So, any conclusions drawn for this group about the correlation between neighborhood quality and social problems, and thus about bias, have to be conditioned on assumptions about where they lived previously.

Table 1 compares the dropout and childbearing rates of various included and excluded groups. Teenagers left out of the sample were much more likely to have left school or had a child than those who were included. The dropout rates of the excluded teens are three-and-one-half times greater than those in the sample. Excluded females are more than eight times as likely to have given birth. This is not just a composition effect, resulting from the fact that blacks and Hispanics are disproportionately excluded. The incidence of these problems is also much higher among the excluded teenagers for minorities.

Teenagers excluded because of inconsistencies lived in very low quality neighborhoods. The mean of %HIGH STATUS is 23.0% for those included in the analysis but just 7.4% for those with inconsistencies. The dropout rate of this group is more than four percentage points higher than that of those from comparable neighborhoods in the sample. The childbearing rate is 12 percentage points higher.¹⁶ So, if the data for this group are accurate, then the data cleaning may bias estimates of neighborhood effects downward, especially in the models of childbearing.

To analyze bias among teenagers living away from home, they were divided into three mutually exclusive groups: students in college dorms, teens living on their own or in institutions, and teens living with relatives other than their parents.

A little less than a quarter of those away from home were students in college dorms. By definition, their dropout rate is zero, while the childbearing rate of the females is .4%.¹⁷ It is almost certainly true that these college students came from above-average neighborhoods. The incidence of these problems among teenagers from comparable neighborhoods in the sample was probably low, but not that low. Thus, excluding college students in dorms probably biases estimates of neighborhood effects downward.

Half of those who lived away from home were on their own or in institutions. As shown in table 1, their dropout and childbearing rates are extremely high. However, we do not know anything for certain about the neighborhoods where they lived when they dropped out or became pregnant. It seems likely that this group would have tended to originate

¹⁶ For this comparison, I used teens in the sample who lived in neighborhoods in which the proportion of high-status workers was 7% or 8%.

¹⁷ Note that, since the average age of 16–18-year-olds in dorms was 17.96, the relevant comparison group is 18-year-olds in the sample. Their childbearing rate was 5.8%.

TABLE 1

DROPOUT AND CHILDBEARING RATES OF GROUPS INCLUDED IN AND EXCLUDED FROM THE STUDY SAMPLE

Group	Total	Dropout Rate (%)	Females	Childbearing Rate (%)
Total PUMS	113,997	11.4	56,219	7.5
Study sample	92,512	7.7	44,466	3.0
Total excluded	21,485	27.4	11,753	24.6
Blacks in sample	10,459	12.7	5,280	12.4
Blacks excluded	3,952	32.8	1,942	35.7
Whites in sample	77,508	6.8	37,007	1.7
Whites excluded	16,236	25.0	9,092	21.0
Excluded by data cleaning	2,698	20.9	1,235	20.6
Not living with parent	18,787	28.3	10,518	25.1
Students in dorms	4,318	0	2,221	.4
On own or in institution	9,368	43.5	5,569	38.6
Living with relatives	5,101	24.4	2,728	17.5

from low-quality neighborhoods with high rates of social problems that cause teenagers to strike out on their own or to become institutionalized. If so, excluding them probably biases estimates of neighborhood effects downward. However, it is conceivable that affluent teens from rich neighborhoods were more likely to live independently because they could get enough financial help from their parents. If that was the case, excluding this group could bias estimates upward.

A little more than a quarter of those away from home lived with relatives. The mean value of %HIGH STATUS for this group is 18.6%. Both the dropout and childbearing rates for these teens are considerably higher than for those in the sample from comparable neighborhoods.¹⁸ If all of these teenagers actually grew up with their relatives, then leaving them out almost certainly biases the estimates downward. But these high rates of social problems probably reflect the fact that dropouts and teenage mothers were more likely to move in with relatives (which is precisely why they were excluded from the study sample). In that case, the size and direction of the bias depend on the difference in quality between the neighborhoods of the parents and the relatives.

If the parents lived in neighborhoods of quality similar to that of the relatives or better, then the correlation is more negative than in the sample and excluding these teenagers probably biases estimates down-

¹⁸ For this comparison, I used teenagers in the sample who lived in neighborhoods in which the proportion of high-status workers was 18% or 19%.

ward. If the parents lived in neighborhoods that were a little bit or even a fair amount worse than the relatives, then there is probably very little bias. The estimates could only be biased upward if the parents lived in much worse neighborhoods than the relatives.

For the sake of comparison, models were estimated that included some or all of these groups. Since these models suffered from simultaneity bias, we would expect them to generate higher estimates of neighborhood effects, and they do. The estimates are consistently larger, by up to about three-fourths. There are sharp increases at the very bottom of the distributions. But in most cases the ratios of the slopes are a little smaller because neighborhood effects are relatively larger above the key point.

Analysis of biases on the overall neighborhood effects does not necessarily say much about whether the very large effects found at the bottom of the distributions are biased in any way. The dropout rate for excluded teenagers from neighborhoods with 4% or fewer high-status workers is 49.4%, compared to 19.9% for those in the sample. The childbearing rate for excluded females from these neighborhoods is 40.7%, compared to 16.5% for females in the sample. Of course, these differences probably result at least partly from endogeneity, that is, the tendency for teenagers with these problems to leave home and move to bad neighborhoods. But these differences are so large that they suggest that even the high dropout and childbearing probabilities in the worst neighborhoods may be biased downward by the exclusions.

Recall that there was not a sharp increase in the dropout probability for black females in the largest cities. One possible reason for this exception to the general pattern is that black females in ghettos were the most likely to be living away from home and thus excluded from the sample. If so, the estimate may be biased downward more for these females than for anyone else. It is conceivable that a sharp increase could be masked by such bias, though that bias would have to be quite large.

Among black females in the worst neighborhoods (i.e., %HIGH STATUS = 4) of the largest cities, the dropout rate for those in the sample is just 10.3%. But among the black females in these neighborhoods who were excluded from the sample, the rate is 50.0%. In marked contrast, the difference for black males in ghettos is only about 10 percentage points. This suggests that many more black females than black males who originated from these neighborhoods were excluded, probably because females with children were the type of teenager most likely to leave home. Thus, the estimate for black females in ghettos may very well be biased downward by a large amount. Whether the bias is in fact great enough to mask a sharp increase is impossible to say.

The census undercount of minorities is a second possible source of sampling bias. Supplemental surveys designed to identify people left out

of the census suggest that those who were missed tend to lack family attachments (Bound 1986). So the census probably did not leave out many teenagers who lived at home or with relatives. But a nontrivial proportion of those living on their own may have been missed. It seems likely that those missed were disproportionately concentrated in bad neighborhoods and perhaps also in cities. The dropout rate was almost certainly extremely high among those who were left out. Thus, estimates of neighborhood effects on dropping out for blacks and Hispanics may be biased downward to some extent by the census undercount. The relative size of the childbearing rate among those missed is less certain because having a child may make a female less mobile and easier to find. But, in general, the teenagers left out of the census were probably the ones who were the most likely to develop social problems. Unfortunately, this is the catch-22 of statistical analyses of problems of the ghetto. It is hard to find the people who matter most.

Measurement error is another possible source of bias. The most fundamental problem in measuring neighborhood effects is defining the neighborhoods themselves. The concept of neighborhood is a little like the concept of obscenity. It is hard to define, but most people know it when they see it. In essence, a neighborhood is a geographic area with unbroken borders in which the density of social ties among residents is significantly greater than the density of ties between residents and nearby non-residents.

In practice, neighborhoods are defined by using socioeconomic criteria, subjective conceptions, and/or geographic features to determine the boundaries. We really do not know how well these methods work. (We could get some idea of this by surveying social ties and measuring their correlation with operational boundaries.) Measurement error could very well be quite large even when all three methods are used together. This is probably the most fundamental problem in attempting to measure neighborhood effects. Recall that the census used only geographic criteria to define the neighborhoods in the sample used here. This aggravates the problem.

There is one saving grace, however. The bias that measurement error generates is unambiguously downward (i.e., toward zero), thus making estimates of neighborhood effects conservative. This is because overlaps between true boundaries and operational boundaries make the operationally defined neighborhoods weighted averages of actual separate neighborhoods. This adds an element of randomness to the measured association between neighborhood characteristics and the dependent variable.

There are two possible sources of specification error: structural misspecification of the model and omitted variable bias. Structural misspecification of the model may bias estimates of neighborhood effects down-

ward. Since neighborhoods were not specifically identified in the census, it was not possible to specify a multilevel hierarchical model. In general, nonhierarchical specifications of multilevel data tend to bias estimates of group-level effects downward.

Omitted variables are a potential source of bias in any study, of course. In this particular case, some of the potentially important omissions are a historical record of the neighborhoods in which the teenagers grew up, an index of their parents' permanent income, measures of attitudes, achievements, and abilities, and an index of the social composition of the teenagers' schools.

It is quite plausible that neighborhoods begin to affect the probability that an individual will develop social problems very early in life; this influence probably continues at least through adolescence. If this is true, then the neighborhood measure used here is just a proxy for some duration and age-weighted index of all the neighborhoods a teenager ever lived in. To the extent that the proxy is imperfect, there is greater randomness in the association between neighborhood quality and the dependent variables, biasing estimates of neighborhood effects downward.

The same basic argument holds true for family income. Recall that family income in the census year had just a small effect on dropping out and no significant effect on childbearing for the whole sample—a surprising result. Among subgroups, family income made more difference for blacks, but its effects still were not very large. It is possible that what really matters is permanent income, and temporary income may not necessarily be a very good proxy for it. To the extent that this is true, the omission of a measure of permanent income may bias estimates of the neighborhood effect upward. However, measures of parental education and occupational status were included, and they may have been reasonably good proxies for permanent income.

There was a little historical information in the 1970 PUMS, and it does offer at least a little insight into the effect of omitting these two longitudinal variables. Recall that, while there was no measure of duration of residence in the neighborhood in the sample, there was a measure of duration of residence at the particular address. Surely this was highly correlated with length of stay in the neighborhood. All those who had been at the same address a long time had been in the neighborhood a long time. Given that census neighborhoods were quite small, it is almost certainly true that a nontrivial proportion of recent movers came from another neighborhood.

If long-term residence and long-term income were significantly better predictors than short-term residence and income, then there should have been some significant interaction effects between %HIGH STATUS and duration of residence and/or family income and duration of residence.

Several different models were estimated to test for interactions, but none were detected. While this examination was by no means definitive, it does suggest that the omission of longitudinal variables may not have been a serious problem.

If true, this result suggests some important things¹⁹ both about the way that neighborhood effects work and about the fundamental nature of dropping out and childbearing behavior.¹⁹ It implies that these behaviors may not be determined by fundamental attitudes or deeply rooted personality traits, factors that affect a person for a long time or develop early in childhood. This result is consistent with epidemic theory, which is predicated on the assumption that the short-term dynamics of peer interaction are an important determinant of these problems. Finally, this result suggests some cause for optimism. If short-term phenomena are responsible for the problems, short-term policy interventions might be quite effective.

As noted in Section III above, cognitive ability, academic achievement, attitudes, and aspirations have been found to affect dropping out and/or childbearing. Omitting them may cause estimates of neighborhood effects on dropping out to have an upward bias. But these factors are probably important mechanisms of neighborhood effects. Their omission would only generate bias to the extent that they are correlated with differences in neighborhoods but unaffected by them.

The same basic argument applies to school effects. Part of the neighborhood effects found here may actually have been attributable to school effects. But it is also possible that schools were mechanisms of neighborhood effects. Although it is important to distinguish between neighborhood effects and school effects and to determine their relation, if any, this issue does not really affect the basic interpretation of the results here. Since the two effects cannot be distinguished, it might be more precise technically to call the overall effect found here a "social context" effect.²⁰ But whether the social processes that generated the sharp jumps occurred in neighborhoods, schools, or both, these sharp increases are no less striking. And, if anything, the epidemic theory makes even more sense when applied to schools because social networks are probably denser in schools than in neighborhoods.

There is no way to estimate the net effect of omitted variable bias. But there is one piece of evidence that suggests that it may not be that large. Most of the important omissions are intimately related to SES. To the extent that these factors affect dropping out and childbearing, it may be as proxies for unmeasured aspects of SES. If so, adding them to the

¹⁹ I would like to thank Christopher Jencks for pointing this out.

²⁰ I would like to thank Anthony Bryk for pointing this out.

model might not reduce estimates of neighborhood effects by much. Among those measures of SES included in the model, there was a pattern of diminishing marginal effects as they were added sequentially.

Models were estimated without any measures of SES for several subgroups. Then the SES variables were added one at a time in different orders, and the models were reestimated. Adding either mother's education, father's education, or head's occupational status reduced the estimated dropout probability in the worst neighborhoods by approximately half for whites and a third for blacks. Adding the second of these reduced the estimates by about an additional fifth for both groups (with some variation depending on the order in which they were introduced). Adding the third of these reduced the estimates just a few percentage points more in each case. Adding family income as the fourth measure had almost no effect for whites and no effect at all for blacks.²¹ The pattern of change in models of childbearing probability was quite similar. Of course, this pattern of diminishing marginal effects would not necessarily hold true for additional measures of SES. But it may indicate that the residual relationship between neighborhood quality and the two outcomes is unrelated to SES.

Another possible source of bias is the endogeneity of the control variables. The model here assumes that all of the control variables are unaffected by neighborhoods. But family income, occupational status, family structure, and residential tenure could each have been affected by neighborhood quality. If so, then estimates of neighborhood effects are biased downward. The total neighborhood effect would be the measured effect, which was direct, plus the sum of indirect effects through these other variables.

One final issue of bias needs to be addressed. Tienda (1989) argued that neighborhood effects in general may be impossible to distinguish statistically because any observed effect could be caused by selection bias. Individuals sort themselves in nonrandom ways among neighborhoods, and so there may be unobservable differences among them. (Of course, all models of behavior share this problem, and it begs the question of whether any kind of statistical inference about people is valid.) But one of the strengths of the epidemic theory is that it can be distinguished in such a way that this is not a big problem. To generate sharp increases in neighborhood effects, there would have to be some kind of "tipping"

²¹ Family income had surprisingly small effects in general, especially for blacks. It did not have much of an effect on either dropping out or childbearing in any of the models. And when it was added as the first index of SES, it reduced estimates of the neighborhood effect in the worst neighborhoods by just a few percentage points in all the models. In those cases, the addition of the second index of SES most affected the estimates.

process (Schelling 1971) in the sorting along the lines of unobservable characteristics. While Schelling argued that neighborhoods do tip along racial lines, it seems highly implausible that they could tip along the lines of unobservable characteristics. For tipping to occur, people must be able to observe characteristics reliably, so that people generally agree on which individuals belong to which groups. In fact, the easy observability of race may be the very reason that it is such a powerful driving force in the development of in-group/out-group distinctions.

In sum, most of the potential biases are downward. I cannot be absolutely sure that the estimates are lower bound, because the magnitudes of the actual biases cannot be calculated. But, unless the net bias is upward and very large in ghettos specifically, the basic finding of sharp increases at the bottom of the neighborhood distributions in the largest cities is valid.

VI. CONCLUSION

The pattern of neighborhood effects on both dropping out and teenage childbearing was precisely the one implied by the epidemic hypothesis, for both blacks and whites. There were sharp jumps in the dropout probabilities of all blacks, black males, all whites, white males, and white females in the worst neighborhoods of the largest cities. There were also large jumps in childbearing probabilities for both black females and white females in these cities. All of these very large neighborhood effects were significant. Outside the largest cities, there were precipitous increases in the dropout probabilities of both blacks and whites and in the childbearing probabilities of black females. But these increases were not significant. In all the cases where there was a jump, it occurred at approximately the same point in the distribution, that is, in neighborhoods where about 4% of the workers held high-status jobs.

There was a huge jump in the dropout probability for black males in urban ghettos but not for black females. However, there was evidence that the estimate of the black females' dropout probability in these neighborhoods may have been biased downward, perhaps by a very large amount.

The pattern of neighborhood effects on dropping out was approximately linear among Hispanics. However, the validity of this finding is open to question since the Census Bureau used different definitions of Hispanic ethnicity in different regions of the country. There were too few Hispanic females with children in the study sample to distinguish any effects on childbearing.

In short, the evidence here does provide strong support for the epidemic theory. But, even though there is other evidence that supports the

hypothesis (Crane 1989), more confirmation is needed. First of all, the data have to be updated. Second, additional ways to test the theory need to be found. Third, alternative explanations of the mechanisms of neighborhood effects that are consistent with these results should be developed, and then, of course, ways to distinguish between the competing theories would have to be worked out. Fourth, research that seeks to determine what types of teenagers leave home and where they go is needed to shed more light on the effects of bias in this study.

It would be premature to make policy recommendations on the basis of these results. The results are promising, however, so it makes sense to think about some policies that should be considered if this study is borne out by further work. The theory suggests that if we knew how to improve the "quality" of particular types of neighborhoods, such efforts could be very effective in reducing the incidence of social problems. Unfortunately, we do not know that much about how to improve neighborhoods. And, while the theory does suggest a couple of things about this, its clearest implications refer to targeting strategies. Thus, for the moment, let us assume that we do have effective policies for improving neighborhoods and consider issues of targeting. The substance of such policies is considered below.

The epidemic theory suggests that we should target two types of neighborhoods for policy interventions: neighborhoods that have already undergone epidemics and neighborhoods that are at high risk of doing so.

Recall that a key result of the model was that neighborhoods will tend to move toward equilibrium levels of social problems. Consider what this suggests about the effects of policies aimed at reducing the incidence of a social problem. Suppose that the incidence of a problem begins at some high equilibrium level and is then forced downward by a policy intervention. The incidence will naturally tend to move back to the high equilibrium unless the policy reduces it so much that it is drawn toward some low-level equilibrium. This implies that a policy intervention that is large but not quite large enough is little better than no intervention at all: if the policy fails to reduce the incidence of a problem enough, that problem will tend to revert back to a high level of incidence on its own. Therefore, a relatively large investment of resources would be required to reverse an epidemic in a community where it had already occurred, large enough to push the neighborhood down to the point where it moves naturally toward a low equilibrium.

Thus, in the context of limited resources, the optimal strategy would be one of "sequential saturation." In other words, if it were too expensive to reverse all epidemics at once, the best approach would be to concentrate resources in a fraction of places rather than to spread resources equally. An initial set of neighborhoods should be helped until they reach low

equilibrium levels of social problems. Once attained, these low levels would be relatively inexpensive to maintain: neighborhoods would be pulled back naturally by the magnetic quality of the equilibrium if exogenous forces generated an increase in the incidence of a problem. Therefore, most of the resources could then be transferred to a second set of neighborhoods.

Another implication of the stability of low-level equilibria is that it would be relatively inexpensive to prevent epidemics in at-risk neighborhoods. Thus, we should take the opposite approach for resources aimed at the at-risk communities. These resources should be spread out rather than concentrated. One nice implication of the results of this study is that neighborhoods at risk might be relatively easy to identify, since all the epidemic effects were found at approximately the same point in the index of neighborhood quality.

The epidemic theory has less to say about how to improve neighborhood quality. But it is not totally silent on this question. Recall that it is predicated on the assumption that social problems spread through peer influence. This suggests that education programs aimed at reducing negative peer pressure and teenagers' susceptibility to it could be effective in preventing epidemics. In neighborhoods where epidemics have taken place, programs aimed at generating positive peer influence might help. It would be theoretically possible to generate a kind of reverse epidemic of positive behavior that would push the incidence of social problems down to some stable low-level equilibrium.

Whether or not the epidemic theory of ghettos is right, the empirical findings here are striking. And they may have important policy implications in and of themselves. They suggest that neighborhood improvement strategies might be very effective in reducing dropout and teen childbearing rates in ghettos and perhaps also in bad neighborhoods outside of large cities. If there are sharp increases in dropping out and early childbearing when neighborhoods descend to a particular threshold of deterioration, there might also be sharp decreases in these social problems if we could find a way of pushing neighborhoods back above these thresholds.

APPENDIX

Some Results from Correlation Analyses of Neighborhood Indices and Logit Models of Dropping Out and Teenage Childbearing

TABLE A1
THE TWO-WAY CORRELATION MATRIX FOR 10 INDICES OF NEIGHBORHOOD QUALITY

	%HIGH STATUS	Median Income	% Poor	% Female Headship	Median Education	% In Labor Force	% Unemployed	% Blacks	% Hispanics	Girl Coefficient
%HIGH STATUS	.	767	-.515	-.391	699	291	-.363	-.325	-.131	-.137
Median income	.	.	-.744	-.450	701	552	-.396	-.373	-.167	-.494
% Poor	.	.	.	595	-.675	-.639	443	560	223	658
% Female headship	-.409	-.390	404	.698	177	375
Median education	368	-.332	-.372	-.291	-.306
% In labor force	-.380	-.269	-.068	-.562
% Unemployed	290	202	244
% Blacks	-.033	318
% Hispanics	095
Girl coefficient

NOTE.—All of the correlations are significant at the level of .0001

TABLE A2

ESTIMATES AND CONFIDENCE INTERVALS FOR DROPPING-OUT RATES AMONG BLACKS

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
3.5% HIGH STATUS	1.171 (.233)	.192	.140-.259
5.6% HIGH STATUS .....	.617 (.227)	.120	.086-.166
8.1% HIGH STATUS .....	.614 (.214)	.120	.088-.162
11.4% HIGH STATUS .....	.605 (.203)	.119	.088-.159
15.7% HIGH STATUS .....	.567 (.205)	.115	.085-.154
20.7% HIGH STATUS .....	.525 (.216)	.111	.080-.151
31.0% HIGH STATUS*	...	.069	.043-.109

NOTE.—N = 10,459.

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept.

TABLE A3

ESTIMATES AND CONFIDENCE INTERVALS FOR DROPPING-OUT RATES AMONG WHITES

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
3.6% HIGH STATUS	1.198 (.279)	.146	.098-.213
7.7% HIGH STATUS .....	.650 (.099)	.090	.078-.104
11.7% HIGH STATUS .....	.596 (.099)	.086	.074-.099
13.8% HIGH STATUS .....	.455 (.099)	.075	.065-.087
18.3% HIGH STATUS .....	.407 (.089)	.072	.063-.083
23.9% HIGH STATUS .....	.233 (.089)	.061	.053-.070
33.2% HIGH STATUS .....	.215 (.096)	.060	.052-.070
49.4% HIGH STATUS*	...	.049	.040-.061

NOTE.—N = 77,508.

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept.

TABLE A4

ESTIMATES AND CONFIDENCE INTERVALS FOR DROPPING-OUT RATES AMONG HISPANICS

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
4.2% HIGH STATUS .....	.792 (.291)	.166	.110-.243
6.6% HIGH STATUS .....	.646 (.268)	.147	.100-.211
9.6% HIGH STATUS .....	.705 (.237)	.155	.110-.212
13.5% HIGH STATUS .....	.523 (.234)	.132	.094-.183
19.3% HIGH STATUS .....	.365 (.237)	.115	.081-.161
27.0% HIGH STATUS .....	.416 (.242)	.121	.084-.169
43.3% HIGH STATUS*	...	.083	.049-.136

NOTE.—N = 4,684.

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept.

TABLE A5

ESTIMATES AND CONFIDENCE INTERVALS FOR DROPPING-OUT RATES AMONG BLACKS IN
THE LARGEST CITIES

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
3.4% HIGH STATUS	1.466 (.275)	.226	.156-.314
5.0% HIGH STATUS .....	.925 (.271)	.145	.098-.209
6.0% HIGH STATUS .....	.887 (.245)	.142	.098-.196
8.6% HIGH STATUS .....	.769 (.224)	.127	.091-.173
11.6% HIGH STATUS .....	.610 (.236)	.110	.077-.154
18.2% HIGH STATUS .....	.372 (.248)	.089	.061-.128
28.1% HIGH STATUS* .....	.	.063	.033-.118

NOTE —N = 3,498

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept

TABLE A6

ESTIMATES AND CONFIDENCE INTERVALS FOR DROPPING-OUT RATES AMONG BLACKS
OUTSIDE OF THE LARGEST CITIES

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
4.5% HIGH STATUS ... ..	.892 (.216)	.166	.122-.221
6.7% HIGH STATUS . . . . .	.499 (.214)	.118	.086-.160
9.0% HIGH STATUS .....	.489 (.192)	.117	.088-.154
12.5% HIGH STATUS .....	.516 (.160)	.120	.095-.151
16.8% HIGH STATUS .....	.460 (.162)	.114	.090-.144
22.2% HIGH STATUS .... ..	.498 (.195)	.118	.089-.156
32.5% HIGH STATUS* .....	.	.075	.045-.123

NOTE —N = 6,961

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept

TABLE A7

ESTIMATES AND CONFIDENCE INTERVALS FOR DROPPING-OUT RATES AMONG BLACK
MALES IN THE LARGEST CITIES

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
3.4% HIGH STATUS	1 920 (.346)	344	.229-.481
5 0% HIGH STATUS	816 (.345)	.147	.090-.235
6 0% HIGH STATUS	775 (.309)	143	.091-.217
8 4% HIGH STATUS . . . . .	.749 (.295)	140	.091-.209
11 5% HIGH STATUS . . . . .	.708 (.295)	135	.088-.203
18 0% HIGH STATUS . . . . .	.493 (.312)	112	.070-.174
27.9% HIGH STATUS* . . . . .	. . . . .	071	.029-.164

NOTE — $N = 1,737$

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept

TABLE A8

ESTIMATES AND CONFIDENCE INTERVALS FOR DROPPING-OUT RATES AMONG BLACK
FEMALES IN THE LARGEST CITIES

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
3.4% HIGH STATUS	678 (.401)	103	.056-.182
5 0% HIGH STATUS	1.090 (.394)	148	.083-.249
6.0% HIGH STATUS	1 021 (.348)	139	.084-.223
8 8% HIGH STATUS	754 (.325)	.110	.068-.174
11 7% HIGH STATUS . . . . .	.657 (.327)	101	.062-.161
18 4% HIGH STATUS	165 (.375)	064	.036-.113
28 3% HIGH STATUS* . . . . .	. . . . .	055	.022-.132

NOTE — $N = 1,761$

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept

TABLE A9

ESTIMATES AND CONFIDENCE INTERVALS FOR CHILDBEARING AMONG BLACKS

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
3.5% HIGH STATUS . . . . .	.767 (.279)	.161	.108-.233
5.6% HIGH STATUS . . . . .	.463 (.273)	.124	.083-.182
8.1% HIGH STATUS .. . . .	.445 (.255)	.122	.084-.175
11.5% HIGH STATUS . . . . .	.374 (.234)	.115	.081-.160
15.8% HIGH STATUS . . . . .	.264 (.238)	.104	.073-.147
20.8% HIGH STATUS . . . . .	.232 (.261)	.101	.068-.147
31.1% HIGH STATUS* . . . . .	.	.082	.047-.139

NOTE.—N = 5,280

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept.

TABLE A10

ESTIMATES AND CONFIDENCE INTERVALS FOR CHILDBEARING AMONG WHITE FEMALES

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
3.6% HIGH STATUS	3.152 (.656)	.034	.012-.093
7.7% HIGH STATUS	1.851 (.256)	.009	.006-.014
11.7% HIGH STATUS	1.600 (.260)	.007	.005-.011
13.9% HIGH STATUS	1.467 (.240)	.006	.004-.009
18.4% HIGH STATUS	1.238 (.224)	.005	.004-.007
24.0% HIGH STATUS . . . . .	.955 (.224)	.004	.003-.006
33.4% HIGH STATUS .. . . .	.889 (.235)	.004	.002-.005
49.6% HIGH STATUS* . . . . .	.	.001	.001-.003

NOTE.—N = 37,007

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept.

TABLE A11

ESTIMATES AND CONFIDENCE INTERVALS FOR CHILDBEARING AMONG BLACKS IN THE LARGEST CITIES

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
3.4% HIGH STATUS	1 126 (357)	.198	.121-.308
5.0% HIGH STATUS .....	.632 (354)	.131	.078-.213
6.0% HIGH STATUS . . . . .	.530 (309)	.120	.076-.185
8.8% HIGH STATUS . . . . .	.516 (.292)	.118	.077-.178
11.7% HIGH STATUS .....	.093 (294)	.081	.051-.125
18.4% HIGH STATUS . . . . .	.296 (336)	.097	.058-.158
28.3% HIGH STATUS* .....	.	.074	.034-.156

NOTE — $N = 1,761$

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept.

TABLE A12

ESTIMATES AND CONFIDENCE INTERVALS FOR CHILDBEARING AMONG WHITES IN THE LARGEST CITIES

Variable	Coefficient (SE)	Estimated Dropout Probability	95% Confidence Interval
3.5% HIGH STATUS	4 513 (1.104)	.102	.018-.412
7.5% HIGH STATUS	2.093 (.917)	.010	.002-.044
11.3% HIGH STATUS .... .	.362 (1.059)	.002	.000-.010
13.3% HIGH STATUS	2 377 (.828)	.013	.003-.05
17.7% HIGH STATUS	2 245 (.794)	.012	.003-.042
22.3% HIGH STATUS	1.689 (.798)	.007	.002-.024
31.5% HIGH STATUS . . . . .	.108 (.846)	.001	.000-.006
46.3% HIGH STATUS* .... .	..	.001	.000-.008

NOTE — $N = 4,084$

* This is the omitted category. Its confidence interval is calculated from the SE of the intercept.

REFERENCES

- Amemiya, T. 1981. "Qualitative Response Models: A Survey." *Journal of Economic Literature* 19:1483-1536.
- Bound, J. 1986. "Appendix. NBER-Mathematics Survey of Inner-City Black Youth: An Analysis of the Undercount of Older Youths." Pp. 443-60 in *The Black Youth Employment Crisis*, edited by R. B. Freeman and H. J. Holzer. Chicago: University of Chicago Press.

- Corcoran, M., R. Gordon, D. Laren, and G. Solon. 1987. "Intergenerational Transmission of Education, Income and Earnings." Unpublished manuscript. University of Michigan, Ann Arbor.
- Crane, J. 1989. "The Epidemic Theory of Ghettos." Working paper, Center for Health and Human Resources Policy Discussion Paper Series, Cambridge, Mass.
- Datcher, L. 1982. "Effects of Community and Family Background on Achievement." *Review of Economics and Statistics* 64:32-41.
- Fischer, C. S., et al. 1977. *Networks and Places: Social Relations in an Urban Setting*. New York: Free Press.
- Granovetter, M. 1978. "Threshold Models of Collective Behavior." *American Journal of Sociology* 83:1420-43.
- Granovetter, M., and R. Soong. 1983. "Threshold Models of Diffusion and Collective Behavior." *Journal of Mathematical Sociology* 9:165-79.
- Hogan, D. P., N. M. Astone, and E. M. Kitagawa. 1985. "Social and Environmental Factors Influencing Contraceptive Use among Black Adolescents." *Family Planning Perspectives* 17:165-69.
- Hogan, D. P., and E. M. Kitagawa. 1985. "The Impact of Social Status, Family Structure, and Neighborhood on the Fertility of Black Adolescents." *American Journal of Sociology* 90:825-55.
- Jencks, C., and S. Mayer. 1990. "The Social Consequences of Growing Up in a Poor Neighborhood: A Review." In *Concentrated Urban Poverty in America*, edited by M. McGeary and L. Lynn. Washington, D.C.: National Academy.
- Jencks, C., M. Smith, H. Acland, et al. 1972. *Inequality*. New York: Harper & Row.
- Kandel, D. B. 1980. "Drug and Drinking Behavior among Youth." *Annual Review of Sociology* 6:235-85.
- Laebow, E. 1967. *Talley's Corner*. Boston: Little, Brown.
- MacLeod, J. 1987. *Ain't No Makin' It*. Boulder, Colo.: Westview.
- Rainwater, L. 1970. *Behind Ghetto Walls*. Chicago: Aldine.
- Ricketts, E., and I. Sawhill. 1988. "Defining and Measuring the Underclass." *Journal of Policy Analysis and Management* 7:316-25.
- Schelling, T. C. 1971. "Dynamic Models of Segregation." *Journal of Mathematical Sociology* 1:143-86.
- . 1978. *Micromotives and Macrobehavior*. New York: Norton.
- Sewell, W. H., R. M. Hauser, and W. C. Wolf. 1980. "Sex, Schooling, and Occupational Status." *American Journal of Sociology* 86:551-83.
- Steinberg, L. 1987. "Single Parents, Stepparents, and the Susceptibility of Adolescents to Antisocial Peer Pressure." *Child Development* 58:269-75.
- Tienda, M. 1989. "Poor People and Poor Places. Deciphering Neighborhood Effects on Behavioral Outcomes." Paper presented at the annual meeting of the American Sociological Association, San Francisco. August 9-13.
- U.S. Bureau of the Census. 1973. *Supplement no. 1 to Public Use Samples of Basic Records from the 1970 Census: Description and Technical Documentation*. Washington, D.C.: Government Printing Office.
- Varaiya, P., and M. Wiseman. 1984. "Bifurcation Models of Urban Development." Pages 61-88 in *Regional and Industrial Development Theories: Models and Empirical Evidence*, edited by A. E. Anderson, W. Isard, and T. Puu. Amsterdam: Elsevier Science.
- Zelnick, M., J. F. Kantner, and K. Ford. 1981. *Sex and Pregnancy in Adolescence*. Beverly Hills, Calif.: Sage.

Book Reviews

Coercion, Capital and European States, A.D. 990–1990. By Charles Tilly. Cambridge, Mass.: Basil Blackwell, 1990. Pp. vii + 269. \$34.95.

Michael Mann

University of California, Los Angeles

It is always good to get a new book from Charles Tilly. This one asks two serious questions: What accounts for variations in time and space between the forms of the European state and why did they eventually converge on the national state? To answer, Tilly sees social development as interaction between two social logics, one comprising the triad of capital, cities, and exploitation, the other the triad of coercion, states, and domination. States are essentially warlike, though in their search for resources to make war they must compromise with the other triad, especially with capitalists. He then analyzes variation between states in terms of two modes of development, termed “coercive-intensive” and “capital-intensive.” The triumph of the national state was the military success of states mobilizing a combination of both—termed “capitalized coercion.” As leading powers conquered and others imitated them, states moved through four phases of organization: patrimonialism, brokerage (mercenary contractors, states financed by independent capitalists), nationalization (states mobilizing their national population and their own fiscal apparatuses), and specialization (states expanding and bureaucratizing their activities).

It is an important, provocative theory, with much originality and richly documented. It is a military-driven theory, although one with (implicit) concessions to Marxists and others who emphasize that states depend on economic resources provided by dominant classes. Thus it works better for earlier periods, when most states were predominantly war-making machines, than for later. There are many original insights about state competition and development up to the 19th century. He is especially good on the transition from “indirect” (states relying on the powers of autonomous local worthies) to “direct” rule (states directly penetrating their territories) in the era of “nationalization.” But in the final era of “specialization” the argument weakens. The vast extension of state civilian activities through the 19th and 20th centuries is poorly explained—nor is it largely explicable in terms of war making. True, there has been a substantial military component in state railroad building, national educational systems, and welfare systems. But it has coexisted with capitalistic and class-conflict-related causes—as well as causes emanating

Permission to reprint a book review printed in this section may be obtained only from the author.

from other aspects of civil society (like religion, region, and the family). These need more serious treatment than Tilly gives them.

The problem is ultimately theoretical. By defining states as "coercion-wielding entities" and treating coercion as war, Tilly must describe war as the "essential," "ultimately determining" state activity and other state activities as contingent. Yet the economic activities of modern states are hardly contingent—nor perhaps are the religious and ideological activities of some states. He cannot explain the most spectacular variation among his states. Whereas many historical states appeared before their subjects as tax collectors and recruiting sergeants, a handful—mainly the national states whose global dominance Tilly is trying to explain—appear also as schoolteachers, social workers, bus drivers, refuse collectors, and a host of other guises. Had he defined the state otherwise, perhaps in terms of political regulation, he would be better placed to explain this. Yet he does honestly face up to the inverse problem, asking in a last, intriguing chapter why so many Third World states have failed to follow the Western civilianizing route. Why have they remained so persistently militaristic? The book ends without an answer, in an understandably depressed mood.

There are both likable and dislikable aspects of style in this book. It is extremely well written, despite containing both theory and a wealth of empirical information. It carries substantial learning lightly, especially on the diversity of European states. The "evolutionary losers," like the Teutonic Knights or the Ottoman Empire, are treated as seriously as winners like Britain. Yet for a book relying somewhat on quantification, it can be slapdash. Historical statistics are not always treated with the necessary care and skepticism and there are inaccuracies: 19th-century Austrian armed forces are wildly exaggerated as are British military expenditures in 1900. It is also odd that, for a book with a theory and lots of references, he barely mentions other theorists. After a perfunctory early nod toward Anderson, Moore, McNeill, Rokkan, and Wallerstein, they do not reappear. Giddens, Hintze, and Marx are not mentioned at all, Skocpol and Weber get a single mention. He does not mention an older tradition of "militarist" theory of the state, into which his own approach fits, encompassing writers like Spencer, Gumplowicz, Oppenheimer, Rustow, and Thurnwald (now all translated). He presumably conceives his peer group to be specialist historians, not generalists or sociologists. Perhaps sociological journals should retaliate by not reviewing his books.

Surveillance, Power and Modernity: Bureaucracy and Discipline from 1700 to the Present Day. By Christopher Dandeker. New York: St. Martin's Press, 1990. Pp ix + 243. \$45.00.

Richard V. Ericson
University of Toronto

This book explores the evolution of bureaucracy and its forms of surveillance in various institutions over the past three centuries. Surveillance is the production of knowledge about, and the supervision of, people in organizations. Bureaucracy, as *the* modern mode of surveillance, is increasingly refined in the central "houses of power" of the state (military and police) and capitalist business enterprise. Analysis of bureaucratic surveillance—of domination through knowledge and its use in rational discipline—is the key to understanding the structure and organization of power in modern societies.

Dandeker uses secondary sources to examine the development of bureaucratic surveillance in the military, the police, and business organizations. These sites were selected because they are and have been the main houses of power that exemplify bureaucratic surveillance, because their forms of surveillance have had a reciprocal influence on each other and on other major institutions, and because analysis of these institutions provides the substantive vehicle for exploring social theories of bureaucratic surveillance.

In the style of Anthony Giddens, Dandeker seeks synthesis in theory. He favors a modified Weberian theory of bureaucracy. Along with industrial society theorists he appreciates that the administrative tasks posed by science and technology foster bureaucratic surveillance as a rational response. While he is least sympathetic to Marxism, because of its overemphasis on the class basis of administrative power and its inability to understand the place of bureaucratic surveillance in socialist societies, Dandeker accepts that the imperatives of capital accumulation and class struggle focused on the business enterprise have a significant bearing on forms of bureaucratic surveillance. He criticizes Machiavellian theory for overemphasizing conflict and self-interest, although he deems it useful in understanding how geopolitical and military struggles among competing states had a significant impact on the rise of bureaucratic surveillance. Foucault is appreciated for his links with Weber regarding how bureaucratic surveillance entails domination through knowledge and rational discipline and how it responds to pressures and conflicts other than those based in economic scarcity or economic class division.

The synthesis leads Dandeker to a relative autonomy-of-bureaucracy position. Bureaucracy is linked with but not reduced to the three other institutional features of modernity (business enterprise, nation-state, and technological advance). Surveillance grows as bureaucracy grows in terms of, for example, formal legal rationality, needs for discipline, inno-

vative uses of information technology, and the occupational division of labor among experts. Dandeker advances his views by taking us inside various "bureaucratic machines" (in spite of his focus on the knowledge society, he adores industrial society metaphors) and by pointing to continuities among them in terms of their formats and technologies of surveillance.

Inside military, police, and business bureaucracies, Dandeker focuses on three particular reasons for growth in surveillance. He points to the growing importance of professional expertise within bureaucracies and to how professional experts have an independent influence on the burgeoning of surveillance. He shows how surveillance increases with the volume and complexity of administrative tasks. Following Tocqueville and Weber, he also appreciates how bureaucratic surveillance mushrooms with incessant demands for equality of condition and attendant citizenship rights.

In comparing interinstitutional aspects of surveillance, Dandeker makes an important contribution by showing how the military and the needs of war have been at the leading edge of development and refinement in surveillance. Business enterprise, policing for domestic security, and social security mechanisms have all been affected first and foremost by bureaucratic surveillance formats originally conceived for military purposes.

The weaknesses of this book stem from the author's overly ambitious efforts at synthesis. The broad sweep of several theoretical strands, several institutions, and several societies over 300 years is too much. On the theoretical level Dandeker relies heavily on previous syntheses by others, especially Anthony Giddens, providing, in effect, a synthesis of syntheses. In some of the substantive areas, especially the one on policing, he also relies on particular textbook syntheses more than on major original works.

The broad sweep in time and place results in little context-specific detail about how particular mechanisms of surveillance actually came about, were put in place, and affected other organizations, practices, and people. At some points there are simply long descriptions of formal features of bureaucracies that are already well known—with some effort, based on secondary literature, to speculate on what might have given rise to these features. For instance, Dandeker notes that prior to the establishment of the public police, " 'policing' meant simply the internal governance of the community, rather than the activities of a specialized state bureaucracy" (p. 114). He accepts the modern meaning and therefore concentrates on the public police and criminal law enforcement. In doing so he misses recent studies that rely more on the original definition of policing as involving, most generally, governance and compliance and that therefore treat as central the very object of Dandeker's interest: bureaucratic surveillance. Studies of political policing, private policing, and the policing of business enterprise under administrative law have

contributed a great deal to our understanding of the intra- and interinstitutional dimensions of surveillance. Attention to original research studies in these areas of policing, and to the empirical detail they offer, would have provided Dandeker with a much better basis on which to compare and contrast theories of bureaucratic surveillance.

Dandeker only touches on signs of the deconstruction of the modern and of the prospect of the postmodern. He acknowledges some aspects of the "disorganized capitalism" position, that there is a tendency toward debureaucratization and decentralization, but he swiftly dismisses this view. He notes that there are signs of the deescalation of the security state, in both its mass armed forces and social security forms, but regards these as mere "challenges to the bureaucratic citizenship state" (p. 223) without exploring the implications of these changes. There is nothing on resistance; for example, how citizens under surveillance or employees (including police and other surveillance operatives themselves) use alternative forms of knowledge and power to ignore, evade, or fight back against the "bureaucratic machine." Secrecy, the other side of the currency of surveillance, is acknowledged to be important but is not analyzed. This is a peculiar omission because an understanding of secrecy is crucial to analysis of surveillance, its effects, and the ability to resist it.

Given these several important omissions, it is not surprising that Dandeker imagines the excesses of bureaucratic surveillance can be contained through a system of checks and balances among market/business enterprises and internal/external policing mechanisms of the nation-state. Bureaucratic surveillance under market capitalism and parliamentary democracy is preferable to anything else he can image. Hence I imagine that the power/knowledge value of this book will be to perpetuate the view that more bureaucracy will work where less has not and that it will thereby play its part in bureaucratic resistance to the decline of surveillance.

Global Formation: Structures of the World-Economy. By Christopher Chase-Dunn. Oxford: Basil Blackwell, 1989. Pp. viii + 419. \$45.00.

George M. Thomas
Arizona State University

In *Global Formation*, Christopher Chase-Dunn constructs a model of the deep structure of the world system (the capitalist mode of production) and how it produces global social institutions (Althusser's social formation and thus global formation). He also attempts an exhaustive review of recent world-system studies. Intricate and repetitive summaries of contending arguments and studies might have been better organized in a series of definitions and propositions for easy cross-reference. The book reads like a handbook (a quite good one that will work well in a graduate

course), but also includes original innovative contributions and presents a well-thought-out research program.

In part 1, Chase-Dunn addresses conceptual issues in world-system theory. For example, he argues that *spatial* boundaries of any world system (including noncapitalist ones) are ascertained by observing density of exchanges; the system's deep structure is defined by the dominant mode of production, its *logical* boundaries and its articulation with other modes within the system. He treats extensively capitalist world-system cycles, trends, and variables.

All of this is an attempt to (1) settle as many questions as possible through empirical methods rather than through metatheoretical polemic and (2) move away from categorical conceptions toward variable ones. He insightfully discusses incorporation into the world system, commodification, and type of labor control as continuous variables. Stages of capitalism, he argues, are best viewed as periodic combinations of world-system cycles and trends. I think in developing these points he is at his best, promising real progress in construction of a world-system theory. However, he often succumbs to the metatheoretical. For example, a central concern is the relative autonomy of the interstate system. He repeatedly recites the formula that capitalist production and the interstate system are two sides of the same coin, adding state formation, nation building, class formation, and core-periphery hierarchy (CPH) to his definition of capitalist production. However, building the nation-state system into the definition makes the question a metatheoretical one and probably will satisfy few.

In the last chapter of this section, Chase-Dunn presents a compelling argument that culture as normative integration plays a very minor part in the world order. However, he evidences the functional aspects of world-system theory by conceptualizing culture as a set of values and norms that produce normative solidarity. While attempting a structural theory, he ignores recent advances along those lines in cultural analysis.

Part 2 deals with the interstate system. Chase-Dunn does a good job of explicating concepts and summarizing current research, especially that which is related to the difference between internal and external state strength. He defines strength relative to opposition and distinguishes between institutionalized resources and the ability to mobilize resources when needed. He suggests that weak states tend to have authoritarian regimes. However, he does not consider the effects of expanded state authority and bureaucracies as dimensions distinct from state power and regime form. Also, he sets up a straw man by suggesting that state-centric models ignore capitalist constraints on state capacities.

Much of this discussion gets bogged down in neo-Marxist debates over class and state autonomy. Nevertheless, by focusing on the interstate system rather than the nation-state, he demonstrates the genius of a global perspective and its potential for solving such issues.

Chase-Dunn pursues the idea that deep structure is to be found in long

cycles, devoting several chapters to cycles of hegemonic rise and decline, severity of wars, and K cycles. The discussion here is very intricate, and it is easy to get lost. He successfully integrates the literature into a coherent story line, delineating three stages of the hegemonic cycle, and suggesting GNP per capita as a good proxy variable for core status.

In part 3, Chase-Dunn addresses the CPH. He argues that the essence of the CPH is domination and exploitation. The core, he asserts, is characterized by capital-intensive production with relatively skilled labor. He insists that we view the CPH as multidimensional and continuous. I think he thereby is better able to analyze the rise and decline of powers. He also develops interesting hypotheses concerning different semiperipheral structures. (Although there is curiously little on the semiperiphery.) This part also reviews the literature on different dependency effects and maintenance of the periphery over time.

The explanation of the reproduction of the CPH is that unequal exchange produces different class power blocks, which in turn produce strong or weak states. Strong nation-states are more adaptable to the market with lower overhead costs; they increase exploitation of the periphery, decrease anticapitalist movements among core labor, and increase core competition for the periphery, which undermines empire and results in the reproduction of the capitalist world system. This otherwise insightful discussion is marred, I think, by the commitment to deep structural reproduction and functional reasoning: Chase-Dunn opens chapter 11 by stating, "The real question is: why is the periphery necessary for the reproduction of core capitalism?" Showing how the periphery reproduces core capitalism implicitly explains the CPH.

In chapter 13 Chase-Dunn integrates his arguments into a model of global formation. While cluttered with more review, it provides a summary of his arguments and agenda, and I suggest reading it after the introduction.

The book ends with several chapters on methodology and world-historic implications, reinforcing the feel of a handbook. Chapter 14 is a very sober argument for theory construction and generalization in historical analysis. These chapters dovetail with the themes of settling theoretical issues empirically and moving from categorical types of variables. In my opinion these goals are not well served by the commitment to function and deep structure. Nevertheless, Chase-Dunn gives us an excellent handbook of the current state of world-system theory; he also provides the conceptual tools and research agenda that show great potential for increasing our understanding of global formation.

The Globalisation of High Technology Production: Society, Space and Semiconductors in the Restructuring of the Modern World. By Jeffrey Henderson. New York: Routledge, 1989. Pp. xxiii + 198. \$42.50.

Gary Gereffi
Duke University

This book is about the globalization of the American semiconductor industry since the 1950s and its implications for the spatial and social processes associated with the microelectronic (or high technology) revolution that has fundamentally transformed today's industrial societies. Using a richly textured historical analysis based on detailed country studies, interviews with company executives, company reports, and other secondary materials, Jeffrey Henderson argues that a distinct regional division of labor in semiconductor production has emerged in East Asia with its own "cores" and "peripheries" and an intricate system of specialized and ever-changing transactions between production units. While the global option pursued by the U.S. semiconductor companies initially led them to invest in East Asian locations in order to tap their supplies of cheap unskilled labor, American firms also established more technically advanced labor processes in Europe, where Scotland has become the main site for semiconductor production (particularly wafer fabrication). These trends lead Henderson to question the adequacy of current development theory to capture the dynamics and consequences of this new mode of industrialization in the world economy.

At a descriptive level, the book lays bare the international division of labor that emerged in the American semiconductor industry by the late 1970s. (Unfortunately, comparisons between the American experience and the subsequent internationalization of Japan's semiconductor industry are not explored in this study.) Semiconductor labor processes, though functionally integrated, were technically disarticulated and spatially separated. The most advanced research and development (R&D) activities took place in the United States, where corporate control functions were concentrated. *Mask making* (the production of the celluloid filaments that contain the microscopic electronic circuits) and *wafer fabrication* (the process by which the circuits on the mask are transferred to the silicon wafer and etched into its surface) were also centered in the United States, although a number of wafer fabrication plants now have been set up in some advanced industrial societies (including Scotland) and quite recently in Malaysia. The bulk of the routine, labor-intensive *assembly* of semiconductors has been dispersed to Third World societies, particularly in East Asia, while the *final testing* of semiconductors, which is a relatively capital-intensive process, tends to be located in the manufacturing plants of highly industrialized nations as well as in technically more advanced Third World sites such as Hong Kong, Singapore, and Malaysia.

This semiconductor division of labor has continued to change in recent

years, and a specifically East Asian division of labor has developed. Hong Kong and Singapore have been the recipients of investments by U.S. companies seeking to set up final testing facilities as well as circuit-design centers, though none of these design centers performs innovative R&D. A number of semiconductor companies also have established their Asian regional headquarters in Hong Kong and Singapore alongside the testing and design operations. Malaysia, Thailand, the Philippines, and Indonesia continue to concentrate on semiconductor assembly, although in 1986 and 1987 the first two wafer fabrication plants in the developing world were established in Singapore and Malaysia, respectively. Scotland's importance as the principal location for U.S. semiconductor production in Western Europe is due, at least in part, to the desire of U.S. companies to penetrate EEC tariff barriers and hence compete effectively with European suppliers for access to the world's third largest semiconductor market (after the United States and Japan).

The theoretical contribution of this book is somewhat harder to identify than its empirical strengths. For Henderson, the "new international division of labor" (NIDL) thesis is seriously flawed by its excessive emphasis on supplies of cheap unskilled labor as the primary determinant of foreign capital's involvement in peripheral industrialization. As a result, NIDL theorists neglect the significant degree of technological upgrading that has occurred in a variety of East Asian manufacturing plants in recent years, and they minimize the importance of state policies and other factors internal to the "host" societies that have shaped the production systems that result from foreign investment. Although world-system theory recognizes the possibility of "genuine" peripheral development within the capitalist world system by the introduction of the concept of the semiperiphery, it too is found lacking because of its inadequate understanding of the tendencies toward diffusion of organizational and scientific/technical control in the core-semiperipheral-peripheral configuration.

What we are left with is a series of tantalizing reflections about "the new mode of industrialization" in the world economy, wherein increasing levels of international specialization make it unlikely that any country, even the most advanced ones such as the United States or Japan, will again be capable of developing a fully autonomous semiconductor industry. Henderson shows convincingly that we are confronted with a changing international division of labor in which a continuum of interrelated semiconductor production activities have emerged at the global, regional, national, and local levels. In an innovation-intensive industrial sector such as electronics, knowledge (embodied in scientific and technical labor power) becomes a major factor of production. While this study does not offer us a systematic new theoretical approach, it clearly points to the kinds of spatial and social interdependencies that need to be explained by development theories that focus on these contemporary realities.

Working-Class Organization and the Return to Democracy in Spain. By Robert M. Fishman. Ithaca, N.Y.: Cornell University Press, 1990. Pp. xiii + 277. \$34.95.

Roberto P. Korzeniewicz
Albion College

Fishman's book is at its best in using a 1981 survey of 324 middle-level labor leaders to highlight the ideological and organizational heterogeneity of this plant leadership during the immediate post-Franco period in Spain. Few labor studies have focused on this level of trade union leadership. *Working-Class Organization and the Return to Democracy in Spain* provides a thorough description of attitudes and beliefs among these representatives during the transition from dictatorship to democracy. The data allow Fishman to critically evaluate some crucial hypotheses regarding the response of plant leaders to political reform and economic change during the transition. The book also seeks to advance broader theoretical conclusions regarding the relationship of labor movements to democratic transitions, but this particular aspect of the study is less developed and would have benefited from a more systematic, comparative approach.

One important conclusion of this study is that the forms of collective action that prevailed within the labor force under the Franco regime proved effective in mobilizing workers and providing some protection to their interests but failed to encourage the formation of strong labor organizations at the plant level. Hence, collective labor action under Franco was based on informal networks of mobilization and a high level of participation by workers who were not officially affiliated with unions. These features strengthened the labor movement during the dictatorship by making it less vulnerable to repression and by "allowing relatively weak organizations to wage massive mobilizations" (p. 257). Over the long-term, however, the same features prevented the development of "equally strong organizations prepared to begin the work of democratic unionism" (p. 99). According to the study, this legacy would come to represent an "inadequate foundation for developing union organization under democracy" (p. 102).

This interpretation is useful as a partial explanation of the inability of trade unions in Spain to sustain high levels of membership/mobilization during the transition. But an added premise behind this interpretation appears to be that the strength of labor movements under democratic regimes should be measured by the prevalence of formal, mass-based organizations geared toward influencing "macroeconomic processes of political or social change" (p. 29). However, this premise should itself be treated as a hypothesis that is subject to verification by further, comparative research. At the very least, one should consider the possibility that labor movements seek to enhance different types of bargaining power according to the constraints and opportunities offered by specific

historical circumstances. For example, Fishman himself notes that the labor movement in Spain, despite its "organizational weakness," has retained the ability to generate massive mobilizations on a periodic basis.

His data on attitudes and beliefs among plant labor leaders allow Fishman to develop a complex explanation of the overall moderation displayed by labor organizations in the late 1970s and early 1980s. He rejects the thesis that labor demobilization was an outcome of the nationwide agreements reached during the transition by the leadership of political parties and trade unions. Instead, he argues that middle-level leaders may have moderated their actions partly because of their "belief in the legitimacy of the democratic state and its ultimate right to regulate society" (p. 234). Even among leaders who did not share this belief, moderation was often adopted in response to difficult economic conditions at the level of the firm (e.g., the danger of plant closings). But, most important, Fishman argues that labor leaders followed a policy of restraint due to the moderation of the rank and file, who resisted engaging in open confrontations with management or the state.

As a whole, then, "economics, the associated moderation of the workers, and the weakness of the unions restrained mobilization more extensively and decisively than politics" (p. 243). As indicated by Fishman, this raises important hypotheses for comparative research: Do economic downturns always encourage labor moderation among the rank and file? Are there situations where the top leadership of organized labor has shown a greater ability to shape and control labor militancy? Comparisons with other southern European countries or some of the Latin American cases may be useful in evaluating these issues. Despite the limits of top-level agreements in limiting labor unrest, however, Fishman emphasizes that the political pacts of the late 1970s were important because, by creating an image of institutional control over social and political conflicts, they legitimized democratic mechanisms.

Fishman's analysis provides a good description of the attitudes reported by plant leaders in the 1981 survey, highlighting, for example, the pronounced gap between "the labor activists' activities in their own workplaces from their ideological orientation toward the system as a whole" (p. 236). However, the study does not analyze in sufficient detail the actual relationships that shaped the behavior and beliefs of plant leaders during this period. What were the mechanisms used by the rank and file to enforce their moderation on the plant leadership? What were the actual channels of communication between the national leadership and the middle-level leaders during this period? Were there significant differences according to the type of workers represented by various trade unions? Answers to these questions would provide a more complete portrayal of the middle-level labor leaders Fishman has examined in this study. Despite these limitations, the book offers important conclusions to social scientists working on labor studies and the issue of democratic transitions as well as to country and area specialists.

Local Politics and Participation in Britain and France. By Albert Mabi-leau, George Moyser, Geraint Parry, and Patrick Quantin. Cambridge: Cambridge University Press, 1989. Pp. xii + 272. \$54.50.

Roger V. Gould
University of Chicago

Focusing on exclusively local political processes might seem perverse in a period characterized—at least on some continents—by the erosion of national boundaries and by a growing sense that many of the problems facing modern societies can only be addressed on a global level. Still, the authors of *Local Politics and Participation in Britain and France* justify their approach by arguing that most people continue to live their daily lives within highly circumscribed localities; in addition, the authors orient their work around the notion of participatory democracy as elaborated in the writings of Tocqueville and Mill. By combining the work of two research teams, each working independently in its own country, the authors hope to uncover general—that is, international—patterns in local participation and at the same time to highlight the effects of national political context on local political processes.

Part 1 contains two introductory chapters, the first of which elaborates four themes—participation, mobilization, links between leaders and citizens, and the notion of community—that determine the organization of the book. The second chapter provides an overview of the workings of local politics in the two countries, the central point of which is the uncontroversial observation that local authorities in Britain enjoy considerably more autonomy than their counterparts in France, despite the centralizing reform of 1972 in the former country and the decentralization act of 1982 in the latter.

The remainder of the book is divided into four parts, corresponding to the four themes outlined in the first chapter; each part juxtaposes a British and a French study, with an introduction and conclusion composed by both research teams. Thus part 2 compares patterns of citizen participation in two towns of roughly comparable size and social composition. On the whole, respondents in the French and British surveys are shown to engage in the same kinds of political activity, although rates of participation appear to be somewhat higher in France. The principal result, though, is that in both towns the level of citizen involvement in local politics is simply not very high.

Part 3 compares four instances of popular protest in France with two cases from Britain—or, more precisely, from Wales. Unfortunately, the case studies suffer from a lack of focus, which makes it difficult for the reader to pull anything meaningful out of these two chapters. The conclusion does not help much in this respect, either, although the authors do point out that instances of mobilization in Britain (a protest against EEC milk quotas and a movement to revive the Welsh language)

seem to have been more firmly rooted in community solidarity than analogous events in France.

The last two parts address classic questions in political science in a more direct way. Part 4 discusses the relationship of local political elites to their constituencies, particularly with respect to the process of agenda setting, while part 5 explores the debate between accounts of political participation that appeal to the notion of community spirit and those that explain participation in terms of social integration. In the first pair of chapters, the authors show (again rather unsurprisingly) that in both France and Britain city councillors tend to be drawn from higher social strata but that their views about the principal issues facing their localities closely matched the views of the general population. Still, there is some suggestion that much of this agreement derives from the fact that local elites themselves shape the issue agenda. In part 5, finally, the authors use survey data to show that in both countries individual participation in local politics is more clearly related to social integration—for instance, membership in local organizations—than to a personal sense of community identity.

One has the feeling at the end of this book that it contains much more information than the authors have been able to communicate. This impression is partly due to the fact that the writing is frequently very unclear, but more significant is the lack of a clear theoretical purchase on the issues and a failure to exploit the comparative approach effectively. Many results are cited that have no bearing on the questions that are supposedly central to the study, while results that do bear on these central questions are discussed only superficially. The most frustrating parts of the book are the conclusions to each section, where the authors spend most of their time explaining why it is difficult to draw meaningful comparisons and very little time telling the reader what is meaningful about the comparisons they have drawn. Ultimately, this study will be more useful for the specific findings it presents than for its broader theoretical conclusions.

Small Property versus Big Government: Social Origins of the Property Tax Revolt. By Clarence Lo. Berkeley and Los Angeles: University of California Press, 1990. Pp. xvi + 269. \$30 00.

Roberta Garner
DePaul University

In a study that is *must* reading for understanding the contemporary political climate, Clarence Lo explores the dynamics of recent "tax revolts" in the United States, movements that brought together lower- and upper-middle-class homeowners with community business leaders for the purpose of lowering state and local tax rates. Most of these protests resulted in measures like California's Proposition 13—"the Watts riot of

the middle class"—that gave disproportionate relief to businesses compared to homeowners, offered no breaks for renters, and in the long run led to cuts in public services, the construction of malls and hotels instead of homes, and a crisis in affordable housing.

In many respects, the tax revolts of the late 1970s were a preview in microcosm of the Reagan era, the formation of a bloc of lower-middle class and probusiness interests that brought about what Lo calls a "reconstruction of inequality." After Watergate and the war in Vietnam, the historical moment appeared open to the victory of a progressive populist movement, but the discrediting of the government ultimately worked in favor of the Reagan forces. Understanding local tax revolts sheds considerable light on why, at the national as well as the local level, the progressive alternative did not come about.

Lo traces the movements in order to show how and why lower-middle-class homeowners joined wealthier residents and businesses in the tax revolt, why renters were left out, and why the outcome favored medium-size local businesses, such as real estate developers. Despite Lo's occasional remarks to the contrary, the reader gets a strong sense that the outcome was overdetermined within the given economic, political, and ideological structure.

In capsule form, the explanation is as follows: the movement began as early as the 1950s in working-class (or lower-middle-class) communities that were genuinely hard-pressed financially. The residents were imbued with a consumerist ideology opposed to the loss of discretionary income, although car expenses, mortgages, and insurance premiums really left them little discretion of any kind. Therefore, they favored a halt to property tax hikes as the most direct approach to their own income squeeze. Government was seen as inefficient, coercive, and inclined to spend money on the undeserving poor. At this stage of the revolt, government officials simply did not respond to lower-middle-class pressure groups, but as the revolt spread to upper-middle-class communities, it gained political force and was joined by business leaders. With the formation of this larger bloc the movement prevailed as a political force, but only on the terms set by the business interests in the coalition. En route to his main conclusions Lo introduces some fascinating related topics, such as the nature of probusiness conservatism, the ambiguities of populism, and the ideology of consumerism.

Lo uses an effective methodology of interviews and oral history and a painstaking reconstruction of local protest events from interviews and newspaper files, with a strong but not exclusive focus on the Los Angeles area. He has listened carefully to the worldviews of his respondents, sometimes perhaps at the cost of precision in his own terminology of class structure. The methodology is ideally suited to understanding the dynamics of a changing movement—its origins, growth, and unintended (for some) consequences. The scale, complexity, and ambiguities of the movement are reflected in a dense and complex line of argument. Lo

moves through the chronology of tax revolts, at the same time developing and adding to the conceptual framework; thus, despite an accessible, even breezy style, the book calls for close attention.

Small Property versus Big Government is essential reading for students and scholars in the areas of social movements, urban studies, public administration, political sociology, and stratification studies. Community activists and government officials can learn from it, too, (hard lessons!) and will find it very readable.

Culture Shift in Advanced Industrial Society. By Ronald Inglehart. Princeton, N.J.: Princeton University Press, 1990. Pp. xviii + 484. \$49.50 (cloth); \$16.95 (paper).

James J. Dowd
University of Georgia

In his famous essay on the problem of generations, Karl Mannheim argued that social change is an inevitable by-product of the "fresh contact" between youthful generations and existing social institutions. As society's new recruits, young people are less committed than their elders to prevailing cultural patterns and more likely, therefore, to confront the world with a more critical (and, perhaps, revolutionary) eye. In his new work, *Culture Shift*, Ronald Inglehart argues that the industrial democracies have undergone, during the postwar era, a sea change in basic values or worldview. Where once materialistic concerns formed the basis of our culture's most characteristic values, now we increasingly demonstrate a commitment to, and concern for, nonmaterialistic values like self-realization, peace, happiness, and social justice. As Mannheim would have predicted, the shift to postmaterialism is most clearly evident in the values of the young.

The bulk of Inglehart's book is concerned with documenting both the increasing prevalence of postmaterialist values over the past two decades and the leading role played in the postmaterialist transition by the young, the educated, and the economically secure. It was during the 1960s, Inglehart claims, that postmaterialist values became a significant element in the subcultures of American and European youth. By the late 1970s, however, such values have penetrated into the dominant elite cultures of these societies as well. For this reason, Inglehart believes that the industrial democracies (and other nations as well) are almost certain to become more, not less, postmaterialistic in the years and decades ahead.

There is much to admire in this work by Inglehart, not the least of which is the obvious effort expended in preparing, collating, and analyzing the massive amounts of data used in this investigation. The fundamental thesis of the book, that a culture shift has occurred that is not interpretable merely as an epiphenomenon of class-related interests, is

presented convincingly and, in my opinion, irrefragably. Having said this, however, I must also add that there are serious problems with the book that almost certainly will limit its influence among political sociologists and students of culture.

Foremost among these problems is the weakness of the book's theory, particularly its avoidance of important issues of human agency. Inglehart presumes a self that is shaped in childhood and is relatively stable thereafter. Yet this traditional personality approach only works if one ignores the considerable evidence of inconsistency, indeterminacy, and contradiction in human biographies. Inglehart's emphasis on stability also fails to capture the important moments of resistance in human lives when individuals act contrary to the demands of social convention. Lacking an understanding of the human capacity for independent action and resistance, Inglehart tends to impute an unwarranted degree of automaticity to historical change. He ignores the role that individuals play in the mobilization and direction of social movements, for example, preferring instead to attribute the rise of the new social movements (NSMs) to "a broad intergenerational cultural shift." Similarly, Inglehart imputes the Soviet Union's failure to remake the Russians into the new "socialist man" to the culturalist dictum that culture changes slowly. He never once acknowledges the significance of the human will to resist.

A second major problem with this book is its lack of originality. By this I mean not only the fact that the basic ideas in this new book are contained in articles written by Inglehart in the 1970s, but also the fact that the basic theme of culture shift produced by a confluence of cohort and period effects has been a staple argument of demographers and age stratification theorists for over two decades. It is disturbing that Inglehart could have written this work without (apparently) knowing of the closely connected writings of Matilda Riley, Norman Ryder, and others (including, e.g., the dozens of articles dealing with the theoretical and methodological issues surrounding cohort analysis). Much of what Inglehart has written in this volume is, in consequence, repetitious of basic postulates from these literatures. Other sections of this volume are, when not redundant, largely extraneous to the central theme of cultural shift. Chapter 3, for example, which offers a defense of the use of survey research methods, adds little to Inglehart's arguments. Also in this category fall chapter 6, which shows beyond any reasonable doubt that postmaterialism is inversely associated with religious fundamentalism, and chapter 7, which purports to understand in a thoroughly mystifying analysis of life satisfaction why almost everyone seems quite content with their lives. I also should point out what seems to be an error in one of Inglehart's tables (11-7, p. 389); in section 2 (pertaining to Left-Right ideology) the percentages are presented incorrectly in reverse sequence.

The most provocative aspect of this work involves the future of post-materialism, particularly in those parts of the world presently sloughing off decades of authoritarian rule. Inglehart mentions Gorbachev's re-

forms in the Soviet Union but does not explore this issue in any depth. He does offer his opinion that, even though postmaterialism is the wave of the present, it probably will not become a totally encompassing worldview because it is too one-sided. He predicts that (p. 334) "in the long run, a new synthesis of Materialist and Postmaterialist orientations will almost certainly emerge, through sheer functional necessity." My own view is somewhat different. I would argue that rationalization processes have entered the political realm such that a strong environmentalist movement and feminist movement have taken root in all of the industrial democracies. The issues that these movements address are being forced into the political sphere such that, today, even the Republican party in the United States has been forced to take a more progressive (postmaterialist) stance on issues like abortion. One can easily foresee the time when all of the issues that these NSMs have raised will have to be incorporated into the platforms of the political parties in order for the parties to survive. It will become increasingly damaging to the parties *not* to have a strong environmentalist plank, for example. Consequently, with the issues of the NSMs incorporated into the parties, two things will happen. The first is that the NSMs will wither because of success, and the second is that the parties will continue to differentiate themselves on basic economic issues. Materialist concerns, that is, are here to stay.

Universities and the Capitalist State: Corporate Liberalism and the Reconstruction of American Higher Education, 1894-1928. By Clyde W. Barrow. Madison: University of Wisconsin Press, 1990. Pp. xx + 329. \$39.50 (cloth); \$17.25 (paper).

Barbara Ann Scott
State University of New York at New Paltz

Clyde W. Barrow has written a provocative, well-researched account of the consolidation of ruling-class control of U.S. higher education during its formative period, 1894-1928. Writing from a nondogmatic Marxist perspective, he provides ample documentation, as few such studies of higher education's history have, of not only *who* rules the university system, but, more important, *how* and *why*. The work, he explains, "is firmly situated in a critical American genre that traces its origins to Thorstein Veblen. Books of this type appear cyclically in 20th century American history whenever higher education is required to assume a larger role in sustaining capital accumulation and the American ideology with each successive economic or legitimization crisis" (p. 10). Not only do critical studies appear. More tellingly, policy reports and management-efficiency studies proliferate in an often-futile attempt to cope with periodic crises that have their roots less in the university system than in the political economy of American capitalism.

Barrow's main contention is that during the first quarter of the 20th century a broad coalition of industrialists, financiers, and government officials succeeded in bringing to the scatter of autonomous postsecondary institutions the "virtues" of modern "scientific management"—"Taylorizing" and systematizing higher education in conformity with the modern corporation. As a result, universities are to be understood as part of the institutional structure of the capitalist state in which academic intellectuals are "regulated . . . through a combination of market incentives, bureaucratic procedures and state coercion." Contrary to the image of the "ivory tower," the university operates as an ideological system quite responsive to the needs of corporate and state management.

Barrow rightly insists on historical specificity, there being no substitute for careful—even painstaking—historical and empirical research. The relation between the state and the corporate economy, between individual actors in different institutional arenas (state, economy, university), the class interest underscoring specific public policy decisions, and so on, "cannot be deduced from any *a priori* model of the capitalist mode of production" or, indeed, of the process of capitalist development. "Political hegemony" . . . remains contingent upon a historical ability to develop coherent conceptions of class interest, to articulate these as concrete issues or policies, and to build political institutions which enable that class to assume leadership in wider coalitions" (p. 5). That insight provides the point of departure for Barrow's analysis of how the university system becomes a crucial arena of "leadership" and institution building for the capitalist class.

Beyond the book's utility for understanding the particular formation of the university system during the first quarter of the 20th century is its utility for understanding features of the consolidation of the modern "liberal state" and its interface with corporate capitalism. Summing up the "emerging consensus" among Marxist scholars, Barrow notes that the state in advanced capitalist societies must reconcile the contradictory demands of corporate capitalism and political democracy. Such a task is always highly problematic, given the periodic and often protracted economic crisis—and, with that, class struggle—endemic to capitalism.

Barrow identifies two crucial strategies that are central to understanding the development of the capitalist state in the last century and also to defining its "crisis management" role: *crisis displacement* and *regulation*. Economic crises have been displaced onto the state by means of a variety of economic and social policies "aimed at managing class conflict" (p. 4). This twofold strategy is, above all, identifiable in the socialization of two costs of private production: manpower training and the provision of a scientific-technical infrastructure to support business, industry, and national defense. These arguments are especially well elaborated and documented in chapter 5 ("War and the Intellectuals: Building a Military-Academic Complex") and chapter 6 ("Is Anything to Be Done? The Intellectual as a Proletarianized Professional").

Throughout this period, however, there have been, Barrow claims, two "axes of stress and contradiction: . . . the meritocratic ideal of achievement and advancement through the schools and universities . . . and the intellectuals' ideal of professional objectivity and autonomy" (p. 8-9). Neither can be denied completely if the educational system is to achieve legitimacy. As a result, corporate and state elites have had, periodically, to make concessions to academic autonomy and democracy. A "crucial pillar" in these power struggles, Barrow contends, has been the ability of "educational administrators to restrict autonomy without eliminating it," primarily by elaborating "endless regulations that constitute . . . rules of the academic game" (p. 254). This is always, however, a highly problematic and inherently unstable process, as Barrow rightly insists.

Barrow's detailed study of the dialectic between the hegemonic demands of the capitalist state and democratic resistance during the formative years of the academic system provides those of us with a stake in the system today with rich insight into the dangers and opportunities that lie ahead.

Agrarian Capitalism in Theory and Practice By Susan Archer Mann.
Chapel Hill: University of North Carolina Press, 1990. Pp. xiv+211.
\$29.95.

Jess Gilbert

University of Wisconsin—Madison

In the late 1970s, a new approach to the social scientific study of agriculture arose in North America. After an early "populist" phase, rural sociologists advanced Marxism as a theoretical tool for comprehending the structure of agriculture (as it was then called), largely in the United States. In addition, several nonrural but agricultural sociologists such as William H. Friedland, Harriet Friedmann, and Susan A. Mann were central to this intellectual movement. In 1978, Mann and her colleague James M. Dickinson published a seminal article in the *Journal of Peasant Studies* that sought to explain the persistence of family-labor farms in advanced capitalist societies. Using Marx's distinction between labor time and production time, they argued that this nonidentity, apparent in some farm commodities, presented certain natural "obstacles to the development of a capitalist agriculture" (their title). Thus the Mann-Dickinson thesis accounted for the survival of family farming. In *Agrarian Capitalism in Theory and Practice*, Mann elaborates this thesis and applies it historically to U.S. agriculture, most notably to cotton production since the Civil War. The book concludes with a provocative theory of the "civilization of nature."

The social organization of family farming is indeed distinctive in the

class structure of advanced capitalism. Not only are the direct laborers also the property owners, but there is little specialized division of labor or separation of work and household. Mann asks how such a traditional (nonwage) form of production can persist in modern society. To address this question, she examines several differences between production in agriculture (however "modern") and other capitalist industries: its seasonal nature, livestock's natural gestation periods, lengthy production times, vulnerability to weather and climate, and perishability of many farm products. These peculiarities of agriculture—all based in nature—exacerbate the labor time/production time difference, which leads to extreme price fluctuations, inefficient use of machinery, and problems in recruiting and managing labor. Moreover, Mann claims that such factors have been overlooked, or rather inadequately *theorized*, in other accounts of agriculture. Further, capitalism's inability to subordinate or "civilize" these natural processes is the key to understanding "uneven rural development" (p. 42).

Mann stresses that these natural impediments to capitalist development are also historically specific. Many such obstacles have been overcome by agricultural research and technology. The analysis of census data on U.S. commodities from 1900 to 1930 (chap. 3) generally supports her explanation of impeded wage-labor use in extensive types of farming (e.g., corn and wheat). Cotton presents the major empirical anomaly. Given its intensive nature and greater labor time/production time fit, why was cotton production the least mechanized and least capitalistically developed?

Mann's two-chapter answer is the best part of *Agrarian Capitalism in Theory and Practice*. She branches out from the Mann-Dickinson thesis to show her broader and considerable skills in historical sociology. Her thorough facility with the large social scientific and historical literature on the American South (including mostly forgotten, decades-old works) is admirable. She traces the rise of sharecropping (as a *family* labor form) in the Southeast and its partial displacement by wage-labor cotton farming in the Southwest. She examines not only the transformation of plantation agriculture during the 1930s and 1940s but, more innovatively, the "revolution from without": the decline of U.S. cotton due to foreign competition and the synthetic fiber industry. Mann's world-historical analysis in these chapters is an exemplary intertwining of social and natural explanations.

Some aspects of the book trouble me. In her theoretical literature review, Mann conflates several distinct schools of thought. She identifies "micro," "subjectivist," and "Weberian" theories as one, and thereby misclassifies several agricultural sociologists (e.g., Patrick Mooney and Alessandro Bonanno, not to mention A. Chayanov and M. Weber). At several points Mann's work recalls the "old Marxism" of the 1970s, when Marx's purity had to be defended and creeping Weberianism was the enemy. Now, Mann's defensive stance strikes me as a bit dated. This

perception is reinforced by her functionalist theory of the state as the "ideal total capitalist." Another problem is terminological. Mann uses "uneven development" to characterize the persistence of nonwage production rather than the phrase's more usual spatial meaning. More objectionable is her synonymous use of "rural" and "agricultural," as in "rural commodities." In fact, most rural jobs in the United States are *not* agricultural, and over half of the 100 top farm counties (in sales) are metropolitan. Such problems aside, Mann's book is a major addition to the growing library of research in the new, theoretically grounded sociology of agriculture.

Women and Social Welfare: A Feminist Analysis. By Dorothy C. Miller. New York: Praeger, 1990. Pp. ix + 181. \$38.95.

Lisa D. Brush and Kristin K. Barker
University of Wisconsin—Madison.

We are enthusiastic about Miller's project. She supplies interesting and comprehensive analyses of six central social welfare programs (Aid to Families with Dependent Children, work training incentives, child custody and support, social welfare services for children, Social Security, and pensions). We are also sympathetic to Miller's method. She deploys feminist theory to investigate gender and the social welfare system. Moreover, Miller's attempt to highlight the gender, race, and class dynamics of the policies she examines is commendable. Readers interested in feminism and social policy will certainly want Miller's book on their library shelves.

Miller concludes that U.S. social welfare programs treat men as workers in the interests of capitalism and treat women as wives and mothers in the interests of male dominance. This conclusion confirms some previous findings in feminist research on gender and social welfare. Moreover, Miller's book contributes to the growing body of persuasive evidence of the role of social policy in the construction of gender relations. For some readers, however, the persuasiveness of Miller's critique may be diminished by her failure to engage the accumulated body of feminist empirical and theoretical work on states and social policies, her functionalism, and her problematic epistemology.

From a variety of feminist theories Miller pulls out the basic pieces of a feminist state theory. She fails, however, to situate her discussion in the context of two decades of empirical work on gender, states, and social welfare. For example, we know states and social policies treat men and women differently. We know the treatment of women does not conform to a strictly "capitalist" model and does not always provide work incentives or encourage self-support. We know the treatment of women differs across a variety of categories (race, age, marital status, and class among

them) in ways that cannot be accounted for by pluralistic, class-analytic, or state-centered theories. We know gender, states, and social policies vary enormously over time, across countries, and in the cases of particular types of policies. The resulting abundance of data has proven stubbornly resistant to intelligible theoretical formulation. Unfortunately, Miller leaves readers unfamiliar with this research tradition and, therefore, undersells the significance of her work.

Instead of locating her project within this empirical context, Miller relies primarily on the theoretical work of Nancy Hartsock. From her reading of Hartsock, Miller draws the concept of "patriarchal necessity." According to Miller,

Patriarchal necessity is the need among the collectivity of men to dominate and control women. It permeates all aspects of the state's relationship to the people, including the design and administration of its social welfare institutions. Women's place in society has been defined as under the control of men, preferably through the institution of marriage. The social welfare system, which has been constructed by the state to provide for citizen needs that cannot (or will not) be met by the marketplace, tends to serve a great number of women who are not attached to men. Social welfare policies that concern women express the dictates of patriarchal necessity, albeit sometimes superseded [*sic*] by the institutional influences of capitalism and white supremacy. [P. 152]

It is worth quoting Miller at length because her definition of patriarchal necessity conveys two points central to her analysis. First, she makes problematic assumptions about men's collective "need" to dominate women. Second, she subscribes to a rigidly functionalist relationship among the state, the family, and the market. She is therefore unable to explain the contradictory effects of social policy in women's lives. Furthermore, she cannot adequately account for the role of social action in welfare state formation. In short, Miller's key concept, patriarchal necessity, and her overall project are mired in functionalism.

Another possible source of dissatisfaction with Miller's book is her epistemology. Miller selectively appropriates various radical, psychoanalytic, socialist, and black feminist theories to develop her readings of social welfare policy. Using theory as a rhetorical justification for inquiry is not new, and Miller is refreshingly forthright about her agenda. Unfortunately the outcome of this approach is that Miller is unable to construct any description of the sources of variation in the effects of different race, class, and gender arrangements on social welfare, either across programs, over time, or in cross-national perspective. Of course, this is less a failure specific to Miller and more a comment on current problems in feminist theory. Epistemology aside, we think Miller makes an important contribution to the collective, cumulative project of developing feminist state theories. As such, Miller's book makes us eager for the next step.

When Ladies Go A-Thieving: Middle-Class Shoplifters in the Victorian Department Store. By Elaine S. Abelson. New York: Oxford University Press, 1990. Pp. vii + 292. \$29.95.

Offending Women: Female Lawbreakers and the Criminal Justice System. By Anne Worrall. New York: Routledge, 1990. Pp. v + 189. \$49.95 (cloth); \$13.95 (paper).

Sally S. Simpson
University of Maryland

One of the goals of feminist criminology is to examine how crime and social control are affected by gender. This requires not mere description of offenders and victims and/or their experiences with the justice process. Rather, crime and social control should be viewed as aspects of a gendered society. These books provide rich descriptions of female offenders *and* of women's lives in general. As such, they offer important insights into the differences that constitute women's experiences.

Each work addresses different concerns and brings diverse theoretical approaches and methods to bear. There are, nonetheless, many common themes between them. Both examine atypical female deviance (defined either in terms of *who* does it—say, ladies stealing—or by the *act* itself such as kidnapping or homicide). An interest in social control is evident, with both authors examining how it operates in the face of gender and/or class contradictions. In keeping with the feminist literature, they show how deviance is medicalized (depression, compulsion, addiction), sexualized, or related to domesticity.

Abelson's book examines department store theft by middle-class women during a period of tremendous economic and cultural change (1870–1914). Yet, this book is more than a history of social change and shoplifting. It is a study of consumer culture and technological change, class privilege and gender roles in transition, female criminality and social control. As Abelson explains, "the collective response to the female shoplifter enables us to explore specific aspects of the process of consumption in America and to assess the tensions, even contradictions, within the larger culture. In the public figure of the shoplifter lay hidden concerns about gender and class" (p. 9).

To achieve this aim, Abelson demonstrates how women's leisure became bound up in shopping and consumption. Representative of the changes affecting middle-class women during this era is the large urban department store. Physically a place of beauty and splendor, the dry-goods bazaar signified wealth, leisure, and material abundance. At the same time it provided almost limitless theft opportunities for the women shoppers it so carefully attracted and cultivated. Middle-class women, who were typically pious and frugal, were bombarded with sensory stimulation in the dry-goods bazaars. As consumerism and traditional culture

clashed and more women gave in to the temptation to shoplift, the new biological and evolutionary sciences—coupled with patriarchal conceptions of the female nature—provided the perfect explanation for such anomalous behavior. Since ladies do not steal (only working-class/lower-order women are thieves), their actions must be the result of uncontrollable impulses linked to their reproductive cycles. As kleptomaniacs, women and their families eschewed criminal culpability and intent. However, by accepting the medical label, these offenders also accepted the restrictiveness of the gender contract.

Along the way, Abelson generates interesting observations about early marketing techniques (women and children are targeted from the beginning); the development and dual intent of glass displays, lighting, and mirrors (although used to display merchandise more attractively, they also improved surveillance and control capacities); and how class conflicts were played out in department store staffing and policing (mostly working-class sales clerks and detectives in opposition to the “ladies” and their families).

Overall, *When Ladies Go A-Thieving*, is an interesting, well-written, and informative work. Abelson relies on numerous primary and secondary sources to sketch her thieves in context. Her focus on the department store as the stage where capitalism, class, and patriarchy clash is effective. On the more critical side, it would have been helpful had she situated her thieves equally well within the domestic arena. One is left with glimpses of family life and intriguing suppositions about how life's constraints for middle-class women are related to their shoplifting—even though they had money in their purses. For example, Abelson suggests that changing roles for women, especially out of the limited family life of middle-class gender relations, lead some to shoplift as a means of “exercising both power and control, even if it was also what one psychiatrist has labeled a form of ‘moral suicide’ ” (p. 171). One cannot help but wish there were more of a historical base from which to launch such interpretations. However, these are minor complaints when compared with the insights one gains from reading this book.

Offending Women is a different kind of book. Worrall (a former probation officer) examines how professional discourses (those constructed by psychiatrists, social workers, probation officers, solicitors, and magistrates) emerge from and refer back to the gender contract as the primary means to categorize and treat female offenders. Her aim is to expose the underlying paradoxes and contradictions of criminal justice discourses by examining women who defy treatment categorization—either by the nature of their offenses or their life circumstances.

For her study, Worrall nonrandomly interviewed 29 probation officers, 8 solicitors, 12 magistrates, 7 psychiatrists, 8 “miscellaneous” individuals associated with the justice process, and 11 female lawbreakers in Great Britain. Through their responses, she constructs a case study from which the relationship between professional discourses (those who claim

to know the truth) and practice (control and treatment of those about whom they claim to know it) is uncovered.

This book is most interesting and provocative when it documents how offenders' (or subjects') accounts of their own lives and criminal circumstances are rendered irrelevant by the formalized rules and authority of the justice process. "Magistrates, solicitors, psychiatrists, and probation officers together constitute a 'chain of signification' in the court-room, authorized to define and give unified meaning to the fragmented and contradictory reality which brings defendants into their purview" (p. 29). This is by no means a smooth process, as each professional has an expert discourse that is not necessarily complementary to others. However, the dominant discourses of femininity (i.e., domesticity, sexuality, and pathology) provide the unifying coherence from which control and treatment decisions flow.

Worrall goes on to describe how the gender contract provides a muting script for women offenders in which they are rendered invisible, guilty, treatable, and manageable. The offenders themselves (much like Abelson's shoplifters) "take on" the proffered descriptions of their deviance, reproducing the legitimacy of the discourse. But "nondescript" offenders use the scripts to gain an element of control over their situations, for example, to retain custody of their children, to avoid arduous responsibilities, to gain some autonomy. These women take away some of the power of the experts through symbolic forms of resistance. They use the contradictions of the gender contract to empower themselves.

This book offers more critique than "new" ground. And Worrall acknowledges that critique alone has its limitations. However, in her attempt to justify the power of critique to provide solutions and a redistribution of power, she fails to convince. Discourse analysis is a useful theoretical tool to make sense of the link between power and knowledge, dominance by expert and submission by subject. But Worrall is unclear about how the fundamental conferrers of power (patriarchy, race, and class) can be broken down by exposing and exploiting the contradictions of expert discourses. In sum, the book is a provocative treatment of how knowledge about female offenders is constructed and used to control and silence women. As such, it has much to say about how women, in general, are defined and controlled. It does leave one, however, wondering where we go from here.

Women at the Wall: A Study of Prisoners' Wives Doing Time on the Outside. By Laura T. Fishman. Albany: State University of New York Press, 1990. Pp. xiii + 337. \$54.50 (cloth); \$17.95 (paper).

Nancy A. Naples
Iowa State University

Laura Fishman's book provides a rich resource for those interested in how the criminal justice system contributes to the social construction of gender and class. The prison system relies on these distinctions and, in doing so, reinforces them. Through in-depth interviews and group discussions with 30 wives whose husbands were serving time in two Vermont correctional facilities, Fishman explores how prisoners' "wives found themselves serving time with their husbands" (p. 195). She details how the criminal justice system persistently reminds women that they share their "husbands' stigmatized status" (p. 270). She also demonstrates the intricate ways that the prison system incorporates the informal work of wives as nurturers, stabilizing influences, and consumers. Fishman notes that "prison policies allowing women to perform personal services for their men and to deliver approved material goods and/or contraband . . . provided the husbands with opportunities to enact dominant roles" (p. 271). She concludes "that imprisonment inadvertently kept most wives at the edge of subsistence while legitimating the male flight from economic support of their wives and children" (pp. 274-75).

The chapters are organized around the criminal justice system in such a way as to reduce the women's identities to their social location as prisoners' wives. Consequently, Fishman neglects to explore the wider context of their daily lives. Three chapters describe how the women perceive their husbands' criminality before and during marriage and before arrest. Subsequent chapters examine how they maintain the marital relationship during their husbands' imprisonment, experience living alone, and adjust to their husbands' return.

The wives' accounts graphically reveal the contradictions of resistance and accommodation. For example, the women resist stigmatization by writing "under protest" on forms to authorize strip searches, filing grievances when mistreated by prison guards, and recognizing the ways prison authorities evaluate their husbands by the wives' behavior toward them during prison visits. The women also accommodate gender and class stereotypes of prison authorities by holding in their anger and putting on a performance during visiting hours. Fear of verbal abuse and strip searches by guards who distinguish between "the good wife" and "the whore" divide the wives against each other even though they understand that the labels are assigned arbitrarily.

Many of Fishman's findings deserve further investigation. For example, she reports how the wives support their husbands during imprisonment, oftentimes at great financial hardship to themselves and their chil-

dren. This relieves the state of some costs incurred by the prison system. Fishman also effectively demonstrates the contradictions between the prison policy that encourages maintenance of family relations and enforces the social control function during visits. Another interesting finding relates to the way home visits support the state's goal of enhancing marital relations while undermining the prisoners' preparation for life on the outside by presenting a false depiction of home life.

Fishman fails to explore the contradictions of gender revealed by her data. Fishman captures the complexities of gender when she describes the women's status as "married but single." The women resist their husband's control and develop an increased sense of self as a result of managing on their own. However, since this does not translate to a high rate of divorce, Fishman concludes that it is traditional gender identity that keeps the women in unfulfilling and frequently abusive marriages. She does acknowledge that the women "remained in their marriages because they had few other alternatives" (p. 275); however, her analysis fails to explore how gender identity is accomplished and embedded in an ever-changing social context.

Another problem with Fishman's analysis derives from her categorization of the wives as "neophytes" or "old-timers" and as "square Janes" or "fast livers." Both dichotomies mask the experiences of wives as related to age, length of time in the relationship, types of crimes involved, and class. In one passage she contrasts the abilities of the husbands of "square Janes" to raise bail with the inability of "working-class husbands" to do so (p. 91). The labels of "square Janes" and "fast livers" place value judgments on those from less economically advantaged backgrounds and further adds to the confusion found in her use of related categories such as lower-class, working-class, and crime-familiar and crime-tolerant communities. Furthermore, Fishman did not include any women of color in her study. Despite her assertion that "there is little reason to believe that their [the white women's] experiences are, in kind, different from those of black wives" (p. 292), one cannot ignore the consequences that racism in the prison system has for women of color.

Fishman's detailed look into "prisoners' wives doing time on the outside" illustrates how analyses of prisons as closed institutions hide the processes by which imprisonment shapes the lives of prisoners' families. Most crucially, Fishman's book underscores the significance of ethnographic and in-depth qualitative research for unmasking these complex processes as well as giving voice to the prisoners' wives.

The Politics and Morality of Deviance: Moral Panics, Drug Abuse, Deviant Science and Reversed Stigmatization. By Nachman Ben-Yehuda. Albany: State University of New York Press, 1990. Pp. x + 348. \$49.95.

William Gronfein

Indiana University/Purdue University at Indianapolis

In *The Politics and Morality of Deviance*, Nachman Ben-Yehuda has put forward an ambitious program for the study of politics, morality, and deviance. The book seeks to combine elements of neofunctionalism, non-Marxist conflict theory, and symbolic interactionism to create what Ben-Yehuda terms "an integrated new analytical look on deviance" (p. 3).

The book is divided into four sections of two chapters each, plus a final chapter in which Ben-Yehuda summarizes the work and offers some concluding remarks. The first two sections (chaps. 1-4) are largely conceptual and feature a discussion of what Ben-Yehuda terms "motivational accounting systems" and an attempt to differentiate "political deviance" from the "political elements in regular deviance." The second two sections (chaps. 5-8) present four case studies, two of which deal with drug abuse policy in Israel and the United States, one of which concerns what Ben-Yehuda calls "deviant science," and one of which examines an example of the reversal of stigmatization drawn from recent Israeli politics.

In the first section, Ben-Yehuda discusses his general theoretical orientation and introduces the concept of "motivational accounting systems" as a way to "bridge processes on the micro and macro levels of analysis" (p. 15). The author's concern here is to meld those relativist and constructionist elements that undergird interactionist approaches to deviance with an emphasis on the importance of power relations, institutional position, and the "hierarchies of credibility and morality" (p. 59). This effort is undertaken as a corrective to prior trends in the sociology of deviance, which Ben-Yehuda sees as marked by "theoretical chaos" and a misplaced concentration on small-scale case studies rather than on "total social structures" (p. 5).

Ben-Yehuda takes the general task of the sociology of deviance to be the analysis of deviance "as part of larger social processes of change and stability in the realm of symbolic-moral universes" (p. 5). Such an approach, in the author's view, needs to combine the relativism of the labeling theorists with an awareness of the importance of power in the creation and application of labels.

Ben-Yehuda's main tool in bringing power and politics back into the study of deviance is the idea of the "motivational accounting system." He relies principally on Mills's seminal discussion of "Vocabularies of Motive" but draws as well on the work of Lyman and Scott on accounts, the attribution theorists, Sykes and Matza's theories of neutralization, and control theorists such as Reiss and Hirschi. Ben-Yehuda

makes thematic the importance of explanatory schema in the genesis and maintenance of deviance and formulates the idea of the motivational accounting system as follows: "Motivational accounting systems provide social actors with ready-made attributions, explaining events not only after they occur, but also giving cause to future behavior" (p. 20).

Given his concern with the issues of power and politics, Ben-Yehuda extends the concept of the motivational accounting system to the macro level, where ideologies and values can, he argues, be regarded as generalized motivational accounts, available to actors in given temporal and cultural positions as ways of grounding, justifying, and explaining behavior. In so doing, he emphasizes that neither individual, micro-level motivational accounting systems nor macrosocial generalized motivational accounts exist in a vacuum. Thus, in his case study of a "deviant science" (early radio astronomy), Ben-Yehuda states that "the generalized motivational accounting systems used by the symbolic-moral universe of science to define its boundaries are reflected in the micro-motivational accounting systems used by specific scientists. These micro motivational accounting systems may also change the macro generalized motivational accounting systems" (p. 181).

The general idea of individual-level motivational accounting systems and their extension to the macro level are potentially useful and important. The connections Ben-Yehuda makes between the various social psychologies he examines in building the concept are illuminating. His attempt to link explanations at the micro and macro levels represents a concrete contribution to the growing literature on micro-macro connections.

The concept is used more successfully at the general level than when applied to the case studies Ben-Yehuda presents in the third and fourth sections of the book. Here, motivational accounting systems appear more as static justifications for policy than as dynamic influences on deviant conduct and social control responses. The last case study Ben-Yehuda presents, a discussion of the Abu-hatzira affair in recent Israeli politics, in which a Sephardic cabinet minister turned well-founded accusations of political corruption to his benefit, provides, however, a very effective illustration of the thesis that deviance is dynamically related to social control and that attempts at labeling may enhance, rather than degrade, the identity of the labeled individual. In sum, the book has considerable theoretical and conceptual merit; one can but welcome the attention Ben-Yehuda has given to the interrelationships between deviance, power, and morality. One can wish, however, that his theoretical insights had been worked out somewhat more fully in the case materials he presents.

Getting Paid: Youth Crime and Work in the Inner City. By Mercer L. Sullivan. Ithaca, N.Y.: Cornell University Press, 1989. Pp. viii + 275. \$12.95 (paper).

Donald Cunnigen
University of Pennsylvania

The political ideologies that have propelled social scientific research during the Reagan/Bush years have made the area of inner-city youth crime research extremely confusing and fascinating. Sullivan attempts to clarify this confused area. He examines an expansive amount of data on young African-American, Hispanic, and white men who live in a Northeastern city. By constructing their life histories, Sullivan explores the sociocultural worlds and psychological dimensions of these groups. He labels his methodology "comparative ethnography," that is, he is using ethnographic techniques and statistical analysis as complementary instruments of inquiry. Sullivan believes the major failure of contemporary sociologists who study inner-city youth crime and related issues is the paucity of research that attempts "to assess both individual and group variation simultaneously" (p. 8).

After offering the reader a general overview of the leading theoretical arguments, purpose, and scope of his study, Sullivan provides descriptions of the neighborhoods, as well as the subjects' educational backgrounds, employment patterns, and entry into criminal behavior. The descriptions are followed by a theoretical discussion and a brief note on social policy. The work would have been enhanced by integrating the theoretical discussion with the descriptive chapters. In addition, the ethnographic chapters would have been better with less interpretive material and more interview material.

Sullivan's work gives some groups more attention in the ethnographic investigation. He acknowledges that the investigation in the African-American community was not as successful as efforts in the Hispanic and white communities. Throughout the work, the reader is told of the relative affluence of the white neighborhood. At one point, the author links affluence with a lower crime rate (p. 111). The statement is indicative of the author's interpretative explanation of "expressive motivations" based on his perceptions of relative affluence. Without defining "expressive motivations," he leaves one to think that the persistent criminal behavioral patterns of African-American and Hispanic youth relative to white youth are related directly to poverty. In ethnographic work on minority groups, researchers should be sensitive to talk that suggests actions based on perceived qualities that may or may not exist.

Despite the uneven examination of the three groups, Sullivan provides an interesting description of the communities. He devotes a great deal of attention to the issue of human capital in the form of work experience and/or education. While he makes a convincing argument for how his

subjects developed individual and group ideas about work and their social environment, he fails to explore all of the related elements.

Although Sullivan addresses the failure of theoretical explanations for crime and delinquency, he never discusses the impact of institutional and cultural racism on their lives. Sullivan's explanation that social networks helped whites with limited educational training to obtain better jobs than their better-educated African-American peers provides part of the answer. But his discussion of the experiences, social environments, and aspirations of the young men suggests that larger cultural and institutional factors play a strong role.

At the end of the work, Sullivan introduces the term "racism" in a brief discussion. He is correct in saying that every criminal action by an inner-city youth is not motivated by a political response to racism. However, I believe that some criminal activity is based on a sophisticated assessment of the political environment. It is not clear whether discussions of American race relations were included in the interviews. The importance or unimportance of racism may have reflected a bias in the interviewing schedule.

In conclusion, Sullivan does not believe that racism prompted his subjects' criminal behavior. Like many of the social critics Sullivan criticizes in his work, he states that "they are not engaging in them [crimes] for anyone's gratification but their own. The youthful thieves who bring money into the neighborhood are not in fact Robin Hoods, stealing as an act of conscious political resistance on behalf of their oppressed communities" (p. 244). Yet, his projected outcomes for his minority subjects, that is, insanity, death, incarceration, and/or poverty, reflect the pervasiveness of institutional and cultural racism in their lives.

Working Class without Work: High School Students in a Deindustrializing Economy. By Lois Weis. New York: Routledge, 1990. Pp. xvi + 240. \$13.95.

Henry M. Levin
Stanford University

In a world where students pursue education largely for its economic payoff, what happens to social and educational attitudes and values when the dominant source of employment disappears? The city of "Freeway" is an industrial town on the outskirts of a major American city. Its largest and dominant employer, "Freeway Steel," reduced its work force from almost 19,000 in 1969 to a token 370 in 1983. The source of employment for generations of Freeway's immigrants and their children evaporated almost overnight.

Weis spent three days a week over the entire 1985-86 academic year in Freeway's public high school as a participant-observer. She interviewed

considerable numbers of teachers, students, parents, administrators, and other school staff as well as observing classes and other school activities. From this she attempts to construct a picture of the impact of deindustrialization on school life and the plans and dreams of the students, teachers, and parents of Freeway. Her interpretive framework consists of a social movement perspective in which groups are victims of circumstances but also have agency to change their circumstances through social struggle.

The bulk of the book is devoted to successive chapters that report school observations and interviews. Separate chapters are devoted to boys and girls as well as to teachers and parents. This presentation is carried out with admirable skill. Weiss exemplifies great craft in her interplay of observations and interviews on the one hand and careful and parsimonious summary and synthesis of her considerable material on the other. Her writing is clear and reflects the imprimatur of a seasoned listener and observer.

Among her observations is the degree to which students recognize the rising certification aspect of education if they are to compete for jobs outside of traditional industry. Yet, education carries little intrinsic importance, and they seem to have no interest in becoming "educated." Education is also an instrumentality to Freeway's teachers, who are mainly concerned with mechanical memorization and homework assignments. Cheating is a common practice among students who see passing courses as simply a means to an end. Although about half of the students had applied to college in 1985, the proportion dropped between 1980 and 1985. This represents an unexplained paradox, since it is exactly the opposite of what one would expect given the views of student, parent, and teacher respondents about the rising importance of college.

Boys had traditional views about gender roles, with expectations of early marriage, children, and a wife serving as homemaker. In contrast, female students were aiming for careers and later marriages, and many girls did not see marriage as part of a desirable future.

Most teachers came from the Freeway area and viewed teaching as superior to the factory work that many had experienced during summers or while working full time prior to entering teaching. They protested against the low pay, high administrative control, and political manipulation of jobs and promotions, even asserting that it was common practice to make payoffs to administrators and school board members to obtain positions. The views of parents reflected the largest break from Freeway traditions by favoring college, late marriages, and a life outside Freeway for their offspring. These views were closer to those expressed by their daughters than their sons. They also expressed dissatisfaction with Freeway High School in preparing their students for college and upward social mobility.

These are among the many interesting findings, but how about the social movement interpretation of the dialectic of accommodation and

struggle? Only the last 35 pages are devoted to extending the rich data base to a social movement analysis. Chapter 7 explores the possibilities of individual females catching the wave of collective feminist consciousness versus being grabbed by the New Right's individualist appeal to working-class women. It also discusses the possibility of working-class males shifting from unionism to the New Right. A brief, final chapter serves as a postscript to the overarching theme of how the working class responds to deindustrialization. Both of these chapters are only tangentially connected to the descriptions of school life and attitudes in Freeway.

The problem in connecting the data to social movements is structural. Social movements and struggle represent dynamic events that can only be documented over time rather than through snapshots of events and attitudes in a one-year time frame. In a cross-sectional study, we can only speculate on their formations and directions, and even this type of speculation must take more than 35 pages. In this respect the book is best summarized as an exemplar of how to construct a lively picture of high school education in a working-class setting that is rapidly becoming deindustrialized. It is considerably less successful in connecting this illustration to underlying social responses by the victims.

Girls and Boys in School: Together or Separate? By Cornelius Riordan. New York: Teachers College Press, 1990. Pp. xiv + 185. \$33.95 (cloth); \$16.95 (paper).

Alan C. Kerckhoff
Duke University

Girls and Boys in School is a thought-provoking book. It persuasively makes the case for single-sex schools. The reader may not be wholly convinced—as I will suggest I am not—but Cornelius Riordan makes his case with such clarity and consistency that the best a skeptic can do is call for more research. Riordan might settle for that conclusion; he clearly prefers systematic investigation to ideological debate.

Riordan devotes a full chapter to the pros and cons of single-sex schooling, but his focus is on its effects on individual students. Outcomes considered are both cognitive (test scores) and affective (self-esteem, locus of control, and attitudes toward women working). Two sets of analyses are conducted with the Catholic school sample of the High School and Beyond (HSB) data set, one using white students from the main HSB sample, the other using minority students from the special minority school HSB sample. The analysis controls for family background, ability, and school characteristics (tracking, curriculum, homework, and adolescent subculture).

Results for whites are mixed: girls in single-sex schools are advantaged

on both the cognitive and affective measures, but boys show a weak reversal of that association. Minority students of both sexes are advantaged in single-sex schools, however. School characteristics explain some of the white girls' advantage, and most of the minority boys' and girls' advantage. Thus, we learn both the advantages of single-sex schools and some reasons for them. Riordan sees the adolescent subculture as a major source of these differences. Emphasis on adolescent life concerns is greater in coeducational settings, and it detracts from the academic purposes of the schools.

Riordan also compares women who attended coed and women's colleges, using data from the National Longitudinal Study of the High School Class of 1972. The samples are very small, but there are some significant results, all favoring single-sex schools—higher levels of educational attainment, occupational returns to education, self-esteem, self-control, and even marital happiness.

In a concluding chapter, Riordan urges us to reconsider the merits of single-sex schooling and recommends that it be introduced into the public schools. Equal opportunity restrictions make actual sex segregation unlikely, but he suggests that voluntary single-sex classes in our schools would serve a useful purpose.

Whether or not we wholly agree with Riordan's interpretation, the consistency of the results is impressive. We cannot simply ignore or reject these findings. A few necessary questions, however, should be considered by future researchers.

There are no detailed tables of regressions using specific variables, but the background measures Riordan uses do not seem wholly adequate. For instance, he uses a previous test in the same specific substantive area (math, say) as an ability control instead of using all available measures. His measures of family background are also limited. For instance, he reports that girls who attend single-sex Catholic schools seem to come from highly traditional families, but the measures used to reach that conclusion are not included in the analysis. These controls probably would not have eliminated the school-type differences, but they might have altered them appreciably.

Riordan also reports numerous differences between the single-sex and coed Catholic schools, but he does not use all of them in the analysis. For instance, in comparison with coed Catholic schools, single-sex Catholic schools are larger, charge higher tuition, and have a more committed faculty, greater disciplinary control, and a higher proportion of students in the college preparatory program. If these variables had been included in the regression analyses, they might have helped explain the single-sex school effects.

One reason these more elaborate analyses were not carried out seems to have been Riordan's desire to write a book understandable by readers with a limited technical background. He succeeds in accomplishing that goal. The book would be useful in an undergraduate course. Yet the

price paid for that simplicity is to leave unanswered the kinds of questions raised here.

Some other questions about the empirical basis for this call for increased single-sex schooling are: Can we generalize these results beyond Catholic schools? Is it reasonable to project them onto the public school system? Unfortunately, we cannot test that generalization with U.S. data. Research in other societies is another basis for testing it, and Riordan reviews some of that research, but much more needs to be done to provide systematic comparisons. Can we assume that a characteristic of schools that "makes a difference" when it is rare will make the same kind of difference if it becomes the norm? In particular, can we assume that single-sex classrooms in a coed school (which he proposes) would have the same effect as single-sex schools? Again, comparative research may help.

I, for one, would want more rigorous testing of the differences Riordan reports before promoting major changes in the organization of our schools. But I am grateful to him for posing the question and presenting such a coherent challenge. Although further work is needed, this book strongly suggests it is worth doing.

Constructing a Sociology of the Arts. By Vera L. Zolberg. Cambridge: Cambridge University Press, 1990. Pp. xii + 252. \$42.50 (cloth); \$13.95 (paper).

Judith Adler

Memorial University of Newfoundland

In undertaking the task of writing a book on the sociology of the arts for Cambridge University Press's Contemporary Sociology series, Vera Zolberg performed the important service, and faced the intellectual hardship, of those who work to define new fields, distant from the major disciplinary settlements. The decision to commission a book on the sociology of the arts for this series is one signal that the field is attaining greater professional legitimation. Zolberg's generously inclusive introduction to a fairly wide range of sociological writing, organized under chapter headings such as "Are Artists Born or Made?" "Audiences and Social Uses of Art," and "How the Arts Change, and Why" will be welcomed as a teaching aid by professors who have had to rely on a few, increasingly dated readers.

The book bears the character of a commissioned work, toned by the series for which it was written. The restrained authorial voice is that of a courteous host, determined to bring harmony to a cacophonous dinner party by bestowing comparable honors on each guest and firmly signaling that each is to converse with the others. Such a strategy rests on a certain theoretical assumption: that a sociology of the arts can be eclectically

constructed by combining the insights, and discounting the lacunae, of authors who drew on varied, or even incompatible, intellectual traditions to tell different kinds of stories about culture. At its best such eclecticism is generous and nondoctrinaire. But it can also become something of a mannerism, as when it grants major authors and very minor writers seemingly equal honors and follows them with equally punctilious observations about shortcomings that do not take into account substantial differences of intent.

The question of "balance" is inevitably central to a review book of this kind. Zolberg highlights the following writers: Howard Becker, Theodor Adorno, Pierre Bourdieu, Herbert Gans, and Russell Lynes. Her text includes references to some work published in French as well as to some in English, although the English-language literature discussed is almost exclusively American, despite the existence of a lively interest in cultural studies in Britain. In devoting considerable discussion to the popular writer Russell Lynes, Zolberg announces the sensible decision to encompass writing pertinent to the sociology of art, whether or not the authors happen to be professional sociologists. And yet, in the end, readers are rarely directed beyond the precincts of professional sociology.

One of the book's most insistent themes is that humanist and social scientific traditions of scholarship have taken different approaches to the arts and that sociologists must be willing to learn from the humanists while cutting their Romantic idealizations of artistic genius with a strong dose of sociological realism. Another theme is that the sociology of art avoids judgments about aesthetic merit only at the risk of purveying a form of reductionism that trivializes its subject matter. Zolberg never works through the problem of how sociologists can simultaneously pursue the goal of value-free science (p. 201) and commit themselves to judgments of aesthetic value, merely hinting that a solution is to be found in "reflexive" self-examination (p. 213). Those who take seriously the author's position that competent sociological study of the arts requires aesthetic as well as sociological sophistication or her even more important assertion that the sociology of art must examine the cultural categories through which its objects of study were determined will have to find guidance elsewhere by sifting through present-day writing in philosophy and aesthetics for relevant work.

The book offers a good summary of the literature on art marketing and patronage, an excellent and original discussion of art academies, a well-sustained consideration of the problem of accounting for stylistic change, and some overhastily constructed ideas about the development of the sociology of art as a field. A recurring lack of clarity in exposition, occasional ungrammatical constructions, word omissions, and references in the text that are neither in the bibliography nor distinguished from other references by the same author all betray passive editing by Cambridge University Press and suggest that scholarly writers may be losing the highly skilled editorial assistance that the best university publishers used to provide.

The Laugh-Makers: Stand-up Comedy as Art, Business, and Life-Style. By Robert A. Stebbins. Montreal and Kingston: McGill-Queen's University Press, 1990. Pp. ix + 160. \$29.95.

Lori V. Morris

Educational Testing Service

The subject matter of this book may be of interest to both sociologists of art and sociologists of work. For this ethnography of stand-up comedians in Canada, Robert Stebbins draws his data from 57 interviews with the comedians, 15 interviews with club owners and booking agents, and observations of 140 performances.

This book attempts to cover a lot of ground: the history of stand-up comedy in the United States and Canada, comedy club protocol, biographical characteristics of stand-up comics, amateurs' means of becoming established, everyday life and survival on the road, and the business aspects of the stand-up comedy world. Because Stebbins opts for breadth rather than depth, he provides little sociological analysis. What he does provide is a more or less journalistic overview of the world of stand-up comedy.

First, he sums up the history of stand-up comedy, stating that it has passed through four phases: (1) "beginning phase" (Mark Twain, emergence of vaudeville); (2) "concert act" (Borscht Belt hotels in the Catskills and 1930s nightclubs); (3) "amateur experimentation" (coffeehouses in the 1940s, development of the "bohemian life" center in Greenwich Village, emergence of the "comedy room" in New York and Los Angeles); and (4) "professionalization and commercialization" (cable television influence, rise in number of comedy chains and circuits). The author argues that the Canadian history of stand-up comedy was an extension of what was going on in the United States. He gives details of the events leading to the establishment of at least one comedy club in every Canadian city with more than 300,000 in population between 1978 and 1984.

Then he describes the structure of a typical show through an extended example of a show at a fictitious club called Foibles. He discusses the use of physical space and the types of jokes told by the different categories of comics (emcees, junior professionals, and headliners). He notes that most comics draw on subjects of universal appeal such as money, sex, and so forth or on routine experiences. He delineates distinctions between the way professionals and amateurs deliver their lines.

Stebbins also collected biographical information on the comedians, such as socioeconomic background, educational profiles, childhood experiences, and parents' reactions to their choice of occupation. He follows this information with a discussion of how they got started in their careers.

While all of this is mildly interesting, the main problem with the book is that Stebbins never states a central exploratory question and fails to

draw any sociological conclusions. What he provides instead is a smattering of information about various topics connected with the world of stand-up comedy, without attempting to link them together analytically or to explore any of them in depth.

For example, Stebbins notes, "All categories of professionals, men and women, anglophone and francophone, complained about the tendency of agents to develop selective lists of acts [people] they want to promote to their clients (rooms, bars, nightclubs, etc.)" (p. 111). Yet, he makes no attempt to explore how a comedian gets on the "selective list." Although some formal strategies for getting established are discussed, for example, showcasing and having an acceptable personal appearance, there is little discussion of the informal actions taken to become established as a comic. Occupational sociologists have shown that for most professions, particularly those involved in art worlds, networking is a crucial component in getting established. Since Stebbins argues that comedians are professionals, we should expect that the way comedians get established would be no different from that of any other professionals. Yet, neither networking nor social negotiations among managers, agents, and comedians are discussed.

Life "on the road" for traveling comics is also described in great detail, including the varying work conditions, the way leisure time is spent when not performing, and comics' attitudes toward the rewards of doing comedy. Some interesting distinctions are made between male and female comics and the type of humor, language, and dress deemed acceptable for females by the audience. But again, little analysis accompanies these data. Many potentially important issues, such as gender differences, are brought up but not pursued.

Overall, it is unclear whom the author was targeting as his audience when he wrote this book. Anyone with a fan's curiosity about comedians would likely find this book interesting. As for sociologists, though, they might best use it as a sourcebook for research ideas that should be pursued and are not.

The Written Suburb: An American Site, an Ethnographic Dilemma. By John D. Dorst. Philadelphia: University of Pennsylvania Press, 1989. Pp. xii + 220. \$45.95 (cloth); \$19.95 (paper).

Bonnie Lindstrom
University of Chicago

In *The Written Suburb: An American Site, an Ethnographic Dilemma*, John Dorst has chosen Chadds Ford, Pennsylvania, as a site that exemplifies the decentered, postmodern condition of deep suburbs. Chadds Ford is a "micro-climate" (in Barthean terminology) in which the legitimizing discourse and the conflict between major mediating institutions

over control of the cultural domain can be clearly delineated. Dorst examines Chadds Ford as a site, as an ideological discourse, and as a series of autoethnographic texts.

The strength of *The Written Suburb* lies in Dorst's clear and lucid exposition of the cultural logic of postmodernity and in his application of the postmodern research agenda. In particular, his use of "depthlessness," Jameson's constitutive feature of postmodernity, to analyze the veneers and vignettes of the museums, craft and art shows, and autoethnographic texts amply confirms that more attention to the concrete means of cultural production is indispensable for the further exploration of postmodernity.

In addition to his lucid exposition and application of postmodernism, Dorst has used the example of Chadds Ford to challenge the traditional Western empirical practices of ethnography that focus on centered subjects rather than on texts. He argues that the pervasiveness of the commodity form in everyday life raises the question of the problematic nature of human subjectivity (the decentered subject) and requires that postethnographic methodologies concentrate on gathering narratives and autoethnographic fragments rather than examine the culture, values, or social relations of the people in the region. In addition, he argues that this decentered condition of modern life disrupts the traditional role of the professional ethnographer by abolishing the distinction between the site of ethnographic observation and the site of ethnographic writing.

John Dorst argues that postmodernity is the hegemonic order in Chadds Ford. However, the expansion of this argument to any analysis of suburbs in general or to traditional ethnographic research methods in particular will not work. Chadds Ford as a site is unique, a blend of deep-suburban development and tourist site in which a visual rhetoric of rural simplicity inspired by Andrew Wyeth's paintings has become the dominant, unifying, consistent image. Its very uniqueness precludes the assumption that one can generalize from this site to other deep suburbs or to suburbia in general. Chadds Ford, as tourist site cum housing development, has no clearly delineated political boundaries, mediating institutions, or sense of personal community. Chadds Ford's residents are dependent on other suburbs for personal and social services (such as shopping, buying at supermarkets, and receiving medical care) and for social networks and relationships. Despite this caveat, I recommend *The Written Suburb* for its clear exposition of the logic of postmodernity and for its challenging application of a postmodern research agenda on a concrete ethnographic site.

Jookin': The Rise of Social Dance Formulations in African-American Culture. By Katrina Hazard-Gordon. Philadelphia: Temple University Press, 1990. Pp. 226. \$24.95.

Charles Stevens
DePaul University

There is a point of view that it is the Africanisms lodged in the black American experience that have provided the strength needed for them to survive in a racially oppressive society. Although these experiences are not easily defined, they are believed to be part of the internal order of America's black community. Gordon believes that aspects of the African past can be found in the dance culture and have been used by African-Americans since slavery. The central theme guiding this social history is that the dance culture, which maintained aspects of its African past, had an important effect on developments in America's black community. The study uses historical references and interviews to examine how dance was used to build a cultural institution.

The starting point for the book is West Africa, where dance has a central role in the culture. Among its many functions, dance in West Africa is used in communal activities and as an integral part of ceremonies that bind groups together as a people. Dance is important in this analysis because it was one aspect of the African-based tradition that was permitted to exist during slavery. The slave quarters provided an environment where slaves could use dancing for their own amusement. The plantation system forcefully controlled slave activity, but, as Gordon indicates, slave owners did not fully understand the relevance of the dance culture. So, despite very harsh restrictions, slaves were able to manipulate the dance activity that included singing, games, and other forms of social interaction reminiscent of the African dance tradition. Entertainment was the most prominent theme, since dancing generally did not offend the overseers. The communal value and communication had to be disguised as part of an "underground culture." Nevertheless, the dance arena provided slaves with a way to insulate themselves. This arrangement was used as a survival strategy and a model for the "jooks" that emerged after the emancipation.

The classic jook that evolved as an institution in the rural South served a function similar to the dance arena in slavery. Drawing on rural culture and the slave experience, the jook included food, gambling, dancing, and activity that encouraged the development of the communal bond. Its manifest function was entertainment, what Zora Neale Hurston described as a "Negro Pleasure House" (p. 79). The "Pleasure House" formed a black community institution, owned and operated by African-Americans. It developed as a secular institution, a counterpart to the African-American religious institution that began about the same time.

They were both used for emotional and spiritual strength to survive in a very oppressive system.

While the classic jook did not survive, it generated what Gordon describes as the "jook continuum." Within the jook continuum, one finds a mixture of the plantation experience and rural culture adapting to the urban environment. In addition to traditional activity, this was where dances were developed and transformed into mainstream dance culture. Racial oppression remained the overarching problem for African-Americans, but the struggle was compounded by other economic and political circumstances. The dance arenas continued to shelter social interaction as a part of the internal order of community life. Although strains of individuality became increasingly apparent, dance arenas maintained some of the "down home" spirit and communal bonds. The "rent parties," a dance arena that masterfully combined aspects of rural culture with current economic concerns, illuminated how folk culture was transformed. "Partying" in the jook tradition was now used as a financial resource for paying the rent. These events remained locally inspired and required the community's support and collaboration with its other aspects. They proved to be important to musicians, especially to piano players in Harlem, who provided significant entertainment while they developed their professional careers.

With later developments in dance arenas, the communal bond lost much of its potency. However, some aspects of the rural folk culture lingered. Perhaps, that is why Gordon believes that "social dancing links African-Americans to their African past more strongly than any other aspect of their culture" (p. 3). *Jookin'* analyzes an underexplored aspect of the black American experience. In the larger sense, the book is a study of social change that depicts how one aspect of African-American culture has been affected by racial oppression and the process of urbanization.

Lives in Between: Assimilation and Marginality in Austria, Brazil, and West Africa, 1780-1945. By Leo Spitzer. Cambridge: Cambridge University Press, 1989. Pp. xii + 250. \$39.50 (cloth); \$11.95 (paper).

Zai Liang
University of Chicago

Much has been written about the assimilation of immigrants. Most of the sociological literature, however, focuses on the assimilation process of migrants within a particular cultural context. A study of the assimilation process that is both comparative and cross-cultural will provide us with a more complete understanding of the patterns of migrant adaptation and psychological feelings of marginality. Leo Spitzer's book, *Lives in Between*, is such a study. On the basis of the life history across generations of three individual families with different cultural, racial, and reli-

gious backgrounds, Spitzer shows us how much can be gained by examining the experiences of migrants in different cultural contexts. There were dramatic similarities in the assimilation processes of these three families. They were all willing to assimilate and, by working hard, became well-to-do. Nonetheless, all felt they were rejected by the mainstream of society. Ironically, the lives of some of the most successful members of these families came to tragic ends.

The first four chapters of the book bring us back to the middle of the 18th century, when the first generations of the three families began their migrations, all for different reasons. Joseph May, a black from West Africa, was sold to a slave owner in the then-British colony of Sierra Leone. The Zweig family, which was Jewish, moved to Austria from Eastern Europe. The Rebouças family's founding members consisted of a Portuguese immigrant to Brazil and his Afro-Brazilian wife. Using information from records, documents, letters, diaries, and journals, Spitzer reconstructs vivid life histories of the assimilation processes of the three families.

There are two major themes running through the book. The first is the linkage between structural change and assimilation, namely, the extent to which the assimilation process is shaped by the social situation. It was the emancipation of the 19th century that allowed May and his descendants to become free men and allowed the Zweig family to escape from the ghettos. It is that same structural change that made the assimilation possible in the first place. Spitzer further applies the sociological concept of "marginality" to understand this interplay in different contexts. The second major theme in all three cases is the psychological feelings of subordination and exclusion. The author attempts to describe the "psychological dynamics of individual engagement in the process of mobility from subordination into a bourgeois world" (p. 131).

Chapters 5 and 6 expand and test this argument by looking at the assimilation experience of some members of the second and third generations of the three families: Cornelius May, mayor of Freetown; André Rebouças, a successful engineer; and Stefan Zweig, one of the most famous and widely read writers in Europe. Following in their parents' footsteps, they all tried to become assimilated into the mainstream of society, and all "made it"; however, they still felt marginal and excluded. As a result, all came to unhappy ends (two of them committed suicide).

The book's major contribution lies in the success of the comparative and cross-cultural approaches to the study of assimilation. Although the book is mainly concerned with a particular historical period, this dual perspective can be a powerful tool in contemporary research on immigrant assimilation as well. In fact we see remarkable similarities among these families' assimilation experiences. Most of the existing theories on assimilation were developed to interpret the 20th-century immigration experience. For example, the concept of "marginal man" was first devel-

oped by Robert Park in the first quarter of this century. It is important to confirm whether this concept is equally useful in analyzing the 18th- and 19th-century migration experience.

The book also demonstrates that, in the age of high-speed computers, the description of individual life history is still valuable, particularly in dealing with historical material in which rigorous quantitative analysis is inappropriate. Looking through the window of individual lives, one can gain an overview of the broader social and historical structures that affected the lives of individuals. Moreover, Spitzer's insights into and interpretations of the psychological experience of exclusion are extremely persuasive.

One of my reservations about the book stems from the fact that all three families discussed started from impoverished circumstances but eventually became very successful. Given this selection bias, it is not clear to what extent the three families are representative of their contemporaries. Although Spitzer does note in the introduction that this is a problem, some discussion of the general mobility patterns in the three countries during that period of history would have been extremely helpful. Another minor point is that Spitzer provides a family tree only for the Zweig family. Similar charts for the other two families would make it easier for the reader to follow the histories of these families.

Immigrant America: A Portrait. By Alejandro Portes and Rubén G. Rumbaut. Berkeley and Los Angeles: University of California Press, 1990. Pp. xxiii + 300. \$39.95 (cloth); \$10.95 (paper).

Thomas J. Espenshade
Princeton University

The United States is once again becoming a nation of immigrants. After several decades of dropping, the proportion of the U.S. population that is foreign born is rising and may reach close to 10% in the 1990 census. The last great waves of international migration occurred before the 1920s, when hundreds of thousands of migrants from Europe came to U.S. shores each year. Today, however, five out of every six legal immigrants come from Asia or Latin America, while Europe's share has dropped to 10%. In addition, the linguistic and cultural diversity that has always characterized U.S. immigration is accelerating.

The purpose of *Immigrant America: A Portrait* by Alejandro Portes and Rubén G. Rumbaut is both to celebrate this diversity for its vitality and richness and to challenge existing negative stereotypes of immigrants. The authors trace the adaptation experiences of contemporary U.S. immigrants in a variety of domains, including economic, social, political, sociopsychological, linguistic, and cultural. Though the book makes frequent references to empirical research, it is intended as a nontechnical

treatment for a general public. The authors' "bottom-line" conclusion can be succinctly summarized: "Overall, immigration has been and will continue to be positive for the country both in terms of filling labor needs at different levels of the economy and, more important, injecting into society the energies, ambitions, and skills of positively selected groups. Qualifications exist, and we discuss them. But in our view, they do not detract from this general assessment" (p. 26).

The book contains seven chapters. Chapter 1, "Introduction: Who They Are and Why They Come," develops an immigrant typology that categorizes U.S. immigrants not by country of origin but by human capital or basic resource endowments. The four types are manual labor migrants, professional immigrants, entrepreneurial immigrants, and refugees and people seeking asylum. The authors argue that the adaptation experiences for migrants of a given type are generally more similar to each other than they are to those of migrants from the same country. This typology is then used throughout subsequent chapters as a framework for describing a variety of immigrant modes of incorporation into American society.

Chapter 2, "Moving," describes patterns of immigrant settlement and points out that a high concentration of a foreign-born group in an area is related to the preexisting kin and family networks. Chapter 3, "Making It in America," deals with levels of income and educational and occupational status attainment among immigrants. The authors present evidence refuting the common perception of immigrants as having uniformly low skills and low incomes. They suggest that how well immigrants do also depends on such contextual factors as public policies of the receiving governments, the conditions of host labor markets, and the characteristics of their own ethnic communities. Chapter 4, "From Immigrants to Ethnic," is devoted to the political adaptation of immigrants. With the passing of the first generation, migrants usually focus attention away from the homeland and toward domestic politics. Yet ethnic resilience tends to shape this participation (including eventual citizenship for many) more along national lines than class lines.

Chapter 5, "A Foreign World," looks at the subjective experience of immigration and especially at the strains and mental health problems of migrants. Much depends on whether they have come here voluntarily as immigrants or as refugees pushed out of their homelands. Chapter 6, "Learning the Ropes," focuses on immigrant youth and their adaptation to the world of the American public school. Finally, chapter 7, "Conclusion," examines the reasons for and the role of undocumented migrants in the United States. It also offers policy recommendations for dealing with future flows of immigrants and refugees.

This book succeeds in its original purpose. Rather than being a dry account of facts and figures, it captures the human drama behind the headlines. My only quarrel is with what the authors left out. First, there is no discussion of appropriate limits to U.S. immigration. Surely 800,000

immigrants a year exert a stronger environmental effect on the United States today, when our population totals 250 million, than they did in 1900, when population size barely reached 75 million. In addition, although the authors do not advocate open borders and, in fact, acknowledge that "some form of control is well justified" (pp. 245-46), they do not discuss what numerical limits they believe are appropriate. Second, their discussion of immigrant "quality" overlooks much of the recent work by the economist George Borjas, who provides convincing documentation that, in recent waves of immigrants, the average level of human capital resources is declining because of the change in source countries. Finally, the policy recommendations in the concluding chapter focus exclusively on immigration policy and ignore *immigrant policy*. In light of the book's emphasis on the processes of immigrant adaptation, it is perhaps surprising that the authors have nothing to say about public policies that might reduce barriers and facilitate the integration of new immigrant arrivals into the mainstream of American society.

The Economic Consequences of Migration. By Julian L. Simon. Cambridge, Mass: Basil Blackwell, 1989. Pp. xxxii + 402. \$39.95

Friends or Strangers: The Impact of Immigrants on the U.S. Economy. By George J. Borjas. New York: Basic Books, 1990. Pp. x + 274. \$22.95.

Yinon Cohen
Tel Aviv University

In the decades before 1960, over half the immigrants to the United States originated in Europe. Since then, Asia has replaced Europe as the source of most immigrants, a trend that has accelerated since the 1965 amendments to the immigration law. In the 1980s, five of 10 immigrants were born in Asia, four in the Americas, and only one in 10 in Europe. This shift in the source countries for immigration, coupled with the decline of the American Empire, has led many to believe that the new immigrants are part of the reason for U.S. economic problems. To be sure, there is nothing new in the thesis that immigration is harmful to the economy or that recent immigrants are not as productive as their predecessors. This argument has been voiced numerous times in the past, despite a lack of evidence. Julian Simon, a population economist, asserts that there is still no evidence for this thesis. George Borjas, a labor economist, disagrees.

Simon is well known for his views that population growth begets economic growth. Consistent with this position, *The Economic Consequences of Immigration* is a passionate attack on the popular belief that immigration has adverse economic effects. This view, he insists, is as wrong today as it was in the past. To make his argument, he draws on nearly 500 studies, as well as on his own research, to document the effects

of immigration on the economies of all the countries for which he could find data. This approach, in addition to the somewhat cumbersome presentation style, results in an encyclopedic book that is not easy reading. Nevertheless, the book is important and useful, for it contains an impressive amount of information and an economic rationale for Simon's main policy suggestion: let more immigrants in.

Simon argues that, relative to native-born Americans, immigrants are a hard-working, young, educated, and creative group. They are more likely than natives to be in the labor force, to save, and to start small businesses. On an even more important issue, Simon argues that immigrants do not take jobs from natives; instead, they create jobs. Furthermore, they have virtually no effect on native wages or the income distribution, and they contribute more to public coffers than they take. Simon estimates that "an immigrant family is an excellent investment worth somewhere between \$15,000 and \$20,000 [1975 dollars] to natives" (p. 343). He therefore suggests that the government double the annual number of immigrants. On the question of whom to admit, Simon's preference is either to auction visas or to rely more on immigrants' human and physical capital in their allocation. Adopting these measures, he explains, will insure that future immigrants will be even more beneficial to the economy than earlier waves were.

Borjas's *Friends or Strangers* is written with a golden pen. Its arguments, insights, and supporting evidence, most of which are based on the author's previous research, are equally impressive. Drawing on some of the same studies as Simon, Borjas agrees that immigrant workers, including illegals, do not displace natives or depress their wages. He also supports the thesis that the waves of immigrants who entered before 1965 were beneficial to the American economy. The disagreement between the two authors is over the "labor market quality" of post-1965 immigrants and its consequences for the economy. Simon believes that they are essentially as productive as earlier cohorts; Borjas demonstrates that they are not and explains why.

Borjas challenges the orthodox theory (which guides much of Simon's work) that views all economic immigrants as a self-selected group of highly skilled and motivated persons. Rather, he maintains, immigrants' "quality" depends on the returns to skills offered in both the countries of origin and those of destination. A positive selection of immigrants occurs from relatively egalitarian countries that, compared with host countries, do not reward their skilled workers. But the selection of immigrants is negative from countries with high income inequality where skills are compensated generously; it is the unskilled who seek to improve their economic standings by migrating to a more egalitarian country where they will be protected by a net of social services. From this general economic model, coupled with the change in the source countries of the new immigrants, Borjas derives the thesis that the skills of recent cohorts of U.S. immigrants resembled the skills of the 1960 flow but not if there was no immigration during the 1970s.

Borjas's main measure for "labor market quality" or skills is hourly wages on arrival. He assumes wages to be a function of productivity, which is in turn determined by skills. Since the ratio of immigrant wages to native wages has decreased between the immigrant cohorts entering in the 1960s and those of the 1970s, it must be that the latter cohorts are less skilled. Sociologists, I suspect, will be reluctant to accept such a measure of skills. (Simon has no problem with this measure. He, too, uses it.) Wages are determined not only by skills but also by structural factors that have little or nothing to do with workers' traits. And of course, a rise in discrimination instead of declining skills may be behind the decline in the relative wages of immigrants. Borjas is aware of these potential criticisms and demonstrates in a few convincing pages that such interpretations are inconsistent with the available data.

That the two books assess differently the quality of post-1965 immigrants is part of the explanation for the different conclusions they reach. The other part may be rooted in the time span they consider. Borjas examines only immigrants. Simon insists that we must also consider the benefits produced by immigrants' offspring (unfortunately both authors fail to discuss seriously the skills of immigrant women). While it is evident that Borjas is correct regarding the declining skills of post-1965 male immigrants, I am sympathetic to Simon's consideration of the economic effects of second-generation immigrants. But, if the skills of post-1965 immigrants are indeed declining, how will they be able to contribute as much to the tax system as earlier waves and what insurance is there that their children will be as successful as the sons and daughters of earlier cohorts? Simon is silent on this issue, perhaps because he assumes no change in the quality of the new immigrants. However, nothing in Borjas's book is inconsistent with Simon's assertion that even unskilled immigration is better than no immigration. And, of course, both authors share the view that skilled immigrants are better than unskilled.

So what is to be done? Borjas explains that it would not be enough if the United States, like other migration countries, were to consider skills and not only family ties as criteria for granting visas. Likewise, selling visas, as suggested by Simon, will not change the attractiveness of the U.S. offer in the immigration market. What the United States must do, then, is to induce the skilled among the world's potential immigrants to migrate here, lest they choose Australia, New Zealand, or Europe. The logical solution, never explicitly stated by Borjas, is for the United States to redistribute income from the poor unskilled to the well-to-do skilled. Only then will skilled immigrants find the U.S. offer in the immigration market attractive enough, while the unskilled will shop for other (welfare) states. The sad irony is that such redistribution of income has been the main outcome of Reaganomics; by the mid-1980s income inequality reached unprecedented figures in recent history, thereby making the United States especially attractive to skilled immigrants. Have these sought-after immigrants actually come, as Borjas's model predicts? The

latest immigrant cohort analyzed by Borjas entered the United States in 1975-79; hence the answer will have to await the analysis of the 1990 census data.

Organizing for Collective Action: The Political Economies of Associations. By David Knoke. New York: Aldine de Gruyter, 1990. Pp. xiv + 258. \$39.95.

Arthur L. Stinchcombe
Northwestern University

If we scan the regression equations in David Knoke's book on voluntary organizations for the big partial coefficients, we find that those with a standardized value above 0.40 tell us that: (a) bureaucracy (employed staff with divided labor) decreases activity on internal organizational issues, while many members' joining the organization for lobbying purposes or for social activities increases it, (b) high revenues and political goals increase the number of ways an organization politically represents members, (c) participation in the organization is increased by total communication within the organization, (d) for political organizations, mobilization efforts increase member activity toward outside (mostly political) targets, but not knowing how to achieve political organizational goals decreases such activity, (e) in organizations with less political goals, aggregate member interest in external issues treated by the organization increases members' externally oriented activity, (f) a wide-agenda scope in politics increases coalition formation tactics, (g) the number of officers with formal authority in an organization is larger for organizations with larger total revenue, (h) people's reasons for staying in an organization tend to be the same as their reasons for joining in the first place, (i) larger total revenues lead to greater bureaucracy in the form of larger paid staffs divided into separate departments, (j) organizations whose goals are to influence public policy are more likely to use member incentives effectively to have the organization lobby for them, while (k) organizations whose leaders say their goals are to provide social and recreational activities have members who are motivated by social and recreational activities, and (l) members and leaders report the incentives of members of the organizations in pretty much the same way.

Besides these big coefficients, a regular result from the regression equations is that, if organizations are more democratic, politically decentralized, or have high member influence, they have higher levels of participation of various kinds, while, if many of the members are interested in internal organizational issues, participation of several kinds is decreased. So democracy without issues, "enthusiastic nonpartisanship," is good for voluntary organizations.

By sociological standards a β of .4 or above is a strong relationship;

there is a good deal of meat here. Knoke follows the procedure of deriving many results about partial coefficients from theory and then finding a great many that are very small. The results given above are a selection that excludes several hundred small or moderate coefficients, giving no, weak, or moderate support to derivations from 27 theoretical propositions. Reading such a book quickly gives an overall impression that most sociology is weak stuff: either not true, or, if true, not very important. I would suggest that we take the strong results and try to reduce them to as few mechanisms as possible, so that we spend our theoretical time thinking about what is mainly going on. I would suggest the following.

1 Most members are motivated to join and participate in organizations because they want the organizations' goals to be achieved. (a) Given that commitment to goals, if the goals require mobilization, then when the organization tries to mobilize them it succeeds. (b) People do not join organizations to fight about those goals, so internal conflict tends to reduce commitment and mobilizability. (c) If people join organizations for political, professional, or social purposes, selling them things or offering Gold Card applications distracts members, who wanted to change legislation, read papers, or have fun, not to do their shopping (I would urge this proposition, supported specifically on p. 137, on the American Sociological Association). (d) If people who have happened to join an organization for some other main motive (e.g., to raise wages) develop an interest in influencing public policy (e.g., to elect friends of unions), they will push their organization toward political activity and will welcome it.

2. Because the goals of the organizations provide the main incentives, the big organizational predictors of participation and commitment will be the mobilizing activity of the organization, the density of communication about goals, the discussion of the organizational goals at all levels of the organization, and the capacity to carry out those goals. Therefore, (a) not knowing how to accomplish organizational goals depresses participation. (b) Having effective political representation in a political organization increases participation. (c) Communication predicts participation, especially when it is specific mobilization in pursuit of organizational goals.

The upshot is that voluntary organizations succeed in getting commitment from their members when they achieve their goals, and the members know it. It is not rational action theory in the modern sense outlined by Knoke, but it is pretty sensible behavior: voluntary participation in collective action is mainly explained by its manifest function.

The Appeal of Civil Law: A Political-Economic Analysis of Litigation.
By Wayne V. McIntosh. Champaign: University of Illinois Press, 1990.
Pp. xi + 223. \$26.95.

Neal Shover
University of Tennessee

Macro-level evolutionary theories of social change have been important forces in the history of sociology and equally important influences in the development of sociolegal theory. The links between what are increasingly being called "environmental conditions" and the volume, nature, and resolution of disputes have been sketched by a number of writers, albeit with varying emphases and causal details. More specifically, some posit a linear historical growth in litigation and other adversarial procedures for managing disputes, while others argue that this process eventually declines in favor of negotiated dispute-resolution procedures as societies industrialize and continue changing. Despite their importance and undeniable appeal, critical empirical tests of these theoretical models are sparse and continue to inspire limited confidence. *The Appeal of Civil Law* by Wayne McIntosh shows there are good reasons for this. McIntosh uses data on a systematic sample of 4,160 civil cases filed in the St. Louis, Missouri, circuit court from 1820–1977 to test theoretical predictions of socioeconomic change and litigation. He partitions litigation into five areas—property law, debt collection, nondebt contracts, domestic relations, and torts—and examines temporal changes in each. He also examines use of the court by eight categories of litigants and the outcomes of cases in which they appeared as plaintiffs or defendants. The author's major findings are strengthened by a multiple-regression analysis of relationships between three groups of independent variables (eight in all) and rates of litigation.

While McIntosh's analysis broadly confirms an increase of bargained-over litigated outcomes in contested issues and a cyclical relationship between socioeconomic conditions and litigation, the complex pattern of findings suggests only qualified support for the underlying theories. Contrary to predictions, he finds that fluctuations in the rate of litigation (cases filed per 1,000 population) are not consistent across the five content areas. For example, contract and property cases dominated the court's workload throughout the 19th and early 20th centuries, while torts and domestic relations cases have predominated since the 1920s. The mix of individual and organizational/corporate litigants also fluctuates substantially over the 150-year period. Last, the extremely heavy volume of litigation in some decades of the 19th century contradicts those who argue that Americans have mounted an unprecedented flood of litigation in recent decades. Although one can quarrel with McIntosh's use of litigation rates based on the total population when the size of the adult population arguably would be a more appropriate population base, it is doubtful

this would have produced appreciably different results. In short, predictions derived from broadbrush evolutionary theories are of limited value for understanding issue-specific disputes and their resolution. This finding alone makes *The Appeal of Civil Law* an important work.

The assessment is tempered, however, by the author's difficulties in suggesting a satisfactory theoretical interpretation for what he does find. McIntosh refers repeatedly to the political economy of litigation, but this concept is neither defined nor elaborated satisfactorily, and he makes little use of the concepts and contentions of stratification theory, class analysis, and critical legal theory. Although, at several points in the book, his interpretive comments emphasize the importance of differential political power and economic resources in the litigation process, these are not pursued systematically. Likewise, the possibility of a master dynamic underlying the social change and litigation nexus is neither acknowledged nor developed. The problem seems to be a tension between a systematic political-economic analysis and the author's preference, elaborated on in the concluding chapter, for a Durkheimian one. Socioeconomic growth, "societal development" (p. 173), and "societal aging" (p. 184) are mentioned variously as major independent variables, while litigation is sketched as an individual, organizational, and community response to "stress" (p. 189) or "strenuous shock" (p. 190). The author's difficulty in providing a satisfying explanation for the flood of divorce and family-related litigation in recent decades is an example of the difficulties created by his interpretive choice. Despite these problems and the interpretive limitations presented by his case-study design and historical data, McIntosh suggests a number of interesting and even provocative ad hoc interpretations of his findings. *The Appeal of Civil Law* is a useful analysis, not only for the competent way the author analyzes the data but also for the way he documents the explanatory overreach and shortcomings of evolutionary theories of sociolegal change. The task ahead is to refashion theories of sociolegal change that will permit more refined and accurate predictions about changing preferences for litigation.

Power in the Highest Degree: Professionals and the Rise of a New Mandarin Order. By Charles Derber, William A. Schwartz, and Yale Magrass. New York: Oxford University Press, 1990. Pp. 275. \$24.95.

Magali Sarfatti Larson
Temple University

The central theme of *Power in the Highest Degree* is the formation and prospects of a new class of intellectuals and experts in contemporary societies. Charles Derber (the senior investigator in the 1981-83 Project on Professionals) calls "logocracy" a regime that has never been approximated in complex societies but that has been partially realized in *units*

of production, such as the workshops of medieval master craftsmen and some of today's professional firms. In logocracies, "those possessing knowledge—not those who invest capital—control and profit from economic enterprise and occupy the highest seats of government" (p. 19). The Zande shamans, the Chinese mandarins, and the medieval clergy are evidence that logocracy is a much more ancient and frequent basis of class power than the ownership of capital.

The "new class" is therefore not new. It only *seems* new in relation to the class structure of industrial capitalism, which is theorized by Marx as a bipolar social formation radically different from its predecessors. The situation of the knowledge classes in early capitalism may in fact seem aberrant and not only because magic and theology lost in the logocratic power. The industrialists' successful efforts to curb the "shop-floor" power that craftworkers derived from their technical knowledge explain in large part the dependency of mature capitalism on a "new class" of specialists.

The division between mental and manual work was, for Marx, the fundamental form of inequality that emerged from the social division of labor. But Marx failed to recognize that "monopolies of knowledge can bring class power as surely as monopolies of capital." The three basic factors of production (knowledge, capital, and labor) are all "essential to produce *all* goods and services in *all* societies and eras" (p. 12). Derber's investigation of knowledge, centered at the outset of a transhistorical concept of production, is implicitly intended as a corrective for the omissions of classical Marxists.

Drawing from a wide roster of sociological and historical works, he uses the first nine chapters to describe how modern professionals and experts have privately appropriated the intangible knowledge resource and what the consequences of this appropriation have been for common workers. The most effective strategy of the new class, its preferred instruments, and its common class culture are predictably rooted in the hallowed institution of education.

Derber does not draw on the findings of the Professional Project until the second half of the book. Comments from respondents and summary tables illustrate the argument that professionals, while eager to extend their privileges and authority in the workplace, willingly accept their position of "subdominance" in "mandarin capitalism," the current regime, which is characterized by the junior position of experts in their partnership with capital. Whether the common culture of professionals—the rational discourse that "mimic[s] scientific rationality and . . . unite[s] under one cognitive cloak physicists and professors of English literature" (p. 33) and their common home in the university—could ever become the basis for the articulation of class identity and interests is a problem that Derber does not claim to solve. His emphasis on the constitution of a *professional class* leads him, on the other hand, to neglect the internal hierarchy in each profession and the vast inequalities among them.

Despite its general theoretical thrust, this work's concrete point of reference is almost exclusively the United States. The author gives no indication of how his analysis might have to be modified in a comparative approach. Overgeneralization may be one of the risks inherent in a theory that ultimately rests on transhistorical factors of production.

The emphasis on production has a more serious consequence. Derber recognizes the importance of state planning in the constitution of the new class and the political divisions between experts in the private and the not-for-profit sector. But the assumption that economic power is directly connected to state power (and matters most) runs implicitly throughout the book. There is no discussion here of the intimate relationships between the modern university and the modern state, university, state, and corporation appear only as preconstituted sources of support in the professionals' "battle for the mind" (pp. 72-75). Derber considers only fleetingly in the postscript the idea that the specialized discourses of experts (secular as well as magical and theological), in becoming *official* discourse, help to *constitute* the state, before he returns to what makes knowledge a factor of production.

Derber's many significant insights (e.g., the double subjection of ordinary workers to two "intertwined hierarchies") would have gained from a more open theoretical perspective. Still, the book's lively style, the comprehensive synthesis of varied works, the abundant contemporary references, and the controversial questions it raises make it a welcome contribution to the growing literature on the new class.

Marginalism and Discontinuity: Tools for the Craft of Knowledge and Decision. By Martin H. Krieger. New York: Russell Sage Foundation, 1989. Pp. xxiii + 182. \$25.00.

Ellsworth R. Fuhrman

Virginia Polytechnic Institute and State University

Marginalism and Discontinuity is not an easy book to assay. It is an attempt to describe the "tools" that natural and social scientists use to examine their respective worlds. And the author notes that natural and social scientists expend a great deal of effort in showing how big events or things can be analyzed into little parts.

The book consists of two parts. Part 1 describes the themes of *Marginalism and Discontinuity* and contains the first five chapters on big decisions, additivity, centers, sticky systems, and economy. Part 2 deals with "Tools and Sacred Practices." In chapters 6-9 and an epilogue, the toolkit of the physicist, the craft of mathematics, doomsday possibilities, and the frontier are discussed. This is a wide-ranging book drawing material from every possible location in the social and natural sciences.

Marginalism as a tool allows us to understand how the world can be

added up. An analysis of discontinuity shows the various ways in which the world cannot be added up. Some parts of the book are fun and interesting to read. I particularly enjoyed the chapter on "The Physicist's Toolkit" (chap. 7). And I found Krieger's discussion of centers (chap. 3) fascinating. He argues correctly, I believe, that science and scholarship are more generally in the business of finding and legitimating centers. Centers are marked or established points from which other elements evolve: for example, complexity, discontinuity, and hierarchy. Centers function to help us characterize phenomena and to motivate accounts (explanations).

Yet, the book does not fit any standard analysis of the rhetorical devices used by intellectual craftspeople. Krieger believes that an account of our "toolishness" will tell us a great deal about the kind of cultural/historical world we inhabit. He tacks back and forth between the prose of the natural scientist and that of the social scientist, not always with great success. Because he lacks a taxonomy of rhetorical devices, it is hard to tell whether the use of some tools rather than others at various times is simply a "random walk" or emanates from a "center."

However, the author does not locate the historical evolution of these tools. And we are never given very clear notions of what it means to understand a tool. I can use a tool for a purpose but not understand the theoretical principles behind it. Some technologies depend on successful theoretical knowledge and others do not. Johannes Kepler (1571–1630), who, among other things, developed and employed the calculus of variations to derive the optimal measurements for beer kegs, found later that coopers, the people who actually built the kegs, were already using those measurements.

It also is hard to tell what to make of Krieger's focus on our toolishness. He argues that a phenomenology of toolishness should help us to bypass traditional, philosophical, and other dualisms, for example, subject-object and idealism-realism. Yet, his own attitude toward toolishness does not escape a kind of pragmatic instrumentalism. He urges us to use the tools that work or have worked. But it is the idea of what "works" that is at issue here, and our tools do not necessarily help us with it. As he notes in a discussion of mathematics, "Just because we can formally prove something does not make it believable" (p. 93).

The development of our tools takes place in the context of specific needs. The use of tools is one of invention and adaptiveness. Yet the author does not indicate that the tools we operate with often function like black boxes or that we can investigate the black boxes of science by doing a network analysis of how these tools and not some others came to be accepted as appropriate. Perhaps, a description of our toolishness would take us into a large bureaucratic jungle. For example, at present, we measure perhaps a hundred physical variables under a wide variety of conditions; therefore, there are thousands of different instruments for measuring these variables (i.e., length, mass, time, electric current, tem-

perature, luminous intensity, amount of substance). Maintenance of standards to which these instruments are calibrated is the responsibility of the National Bureau of Standards, which works through a hierarchy of federal, state, and private laboratories.

I cannot think of a more interesting project than to describe the various tools that natural and social scientists have at their disposal. And it would be too easy to ask, Is there a difference when our tools function simply as tools and not as ideology? Yet, even if we accept Krieger's description, for example, of the mathematical use of tools, I want to ask: What mathematics? Mathematical writing, according to the American Mathematical Society, is divided into more than 3,000 categories. The division of labor within a given discipline suggests that we need to be as clear as possible about which tools go with what science or subspecialty. This book begins that journey.

A Measure for Measures: A Manifesto for Empirical Sociology. By Ray Pawson. London: Routledge, 1989. Pp. ix + 337. \$15.95 (paper).

David G. Wagner
State University of New York at Albany

This is an important book. Ray Pawson has set out to revitalize empirical sociology, a discipline he sees as buffeted in recent years by phenomenological and relativist critiques. Along with the critics he rejects an unreconstituted positivism, but he goes beyond them, however, to challenge the empiricism they share with positivism. Pawson then constructs a new set of rules for sociological measurement to supplant the ones he has discarded. These rules, grounded in actual sociological practice, emphasize the centrality of abstract theorizing and the logic of experimentation in all methodological decisions.

Pawson begins with a review of four primary problems of empirical sociology raised by the phenomenological and relativist critiques. First, changes in cultural meaning render sociological measurement irrelevant; second, scales constructed from these meanings are arbitrarily chosen; third, meanings are artificially created and imposed in the process of communication; and fourth, the fact that observation is theory laden renders all measurement selective.

Part 1, "Desperate Measures," applies these criticisms to current measurement practice in sociology. Both variable analysis (largely causal modeling) and scaling are found wanting. However, Pawson also finds the criticisms wanting. They reduce measurement to the replication of ordinary language when the true purpose of measurement is the embedding of social properties in testing theories.

In part 2, "A Measure of Realism," Pawson focuses more direct attention on the interdependence of theory and observation. Whenever theo-

ries are tested, a plethora of theories is involved; some are employed in the construction of measurement instruments, others serve as rival accounts against which any given theory is compared. As long as one theory is not used to play both roles, there is no circularity between theory and observation. Selectivity is always present, but it does not hinder the empirical evaluation of theories.

Pawson proceeds to identify and develop a series of research strategies on the basis of his understanding of the interdependence of theory and observation. For example, he proposes an emphasis on "generative reasoning" (i.e., the statement of abstract models of underlying social mechanisms controlling a system of properties) and "closed systems" (i.e., experimental systems that enable researchers to isolate and test the operation of generative mechanisms). He argues that we should focus on "explanatory networks" of theories, allowing research to link speculative knowledge in some areas with well-developed knowledge in others. He shows how the interconnectedness of theories engenders a "transduction process" and an "intersection process." The former permits the testing of theories regarding a given property through the transformation of such a property into that of another, independent theory. The latter allows comparative evaluation of rival theories without recourse to a neutral observation language.

These strategies together constitute the foundation for a "realist model of measurement" that is refined and applied in part 3, "Practical Measures." This part, covering more than half the book, provides a detailed analysis of work in class and stratification. It provides evidence that sociological practice often reflects Pawson's realist model, even if methodological philosophy does not. It also leads to a summary statement of new rules for sociological measurement: (1) measurement is based in theory; (2) theories represent the action of generating mechanisms; (3) theories are formulated in an abstract calculus of formally defined concepts; (4) empirical evaluation of theories is always comparative; and (5) observation can encompass only that which is intersubjective or mutually known.

Pawson's critiques are detailed, closely reasoned, and devastating. His proposals are clear, thoroughly developed, and admirably applied to contemporary work in sociology. My only complaint concerns the step he does not take. Much of Pawson's argument depends on strict application of the logic of experimentation. Yet he discounts the possibility of experimental work in sociology. Thus, he ignores the growing literature in group processes that provides perhaps the clearest application of many of Pawson's ideas. (See, e.g., the volumes of *Advances in Group Processes*, edited by Lawler and Markovsky and published by JAI.)

But this is a quibble. Pawson's primary audience is the vast sea of survey researchers in sociology. He has effectively demonstrated the inadequacies in current survey methodology and has clearly developed and applied an alternative that overcomes these inadequacies. His book de-

serves a close reading by all who purport to do empirical work in sociology.

It also deserves a close reading by those responsible for the critiques of the current survey methodology that Pawson is reviewing. Pawson tackles them directly, identifies their own adequacies, and points the way out of the miasma created by their uncritical acceptance. To paraphrase Pawson's final sentence: "Empirical research is alive and well in sociology."

The Freudians: A Comparative Perspective. By Edith Kurzweil. New Haven, Conn.: Yale University Press, 1990. Pp. xii + 371. \$35.00.

Peter Homans

University of Chicago

It is no secret that the relations between sociology and psychoanalysis have never been cordial or particularly interesting and have only on occasion inspired or generated new knowledge. Still, there is a literature (though thin), and it has a progression (though halting). Three styles characterize it: unmasking of the one by the other, integrating or synthesizing the two, and culture critical.

As usual, it was Freud who started this fight when, in midcareer, he grandiloquently announced that all sociology was simply group psychology, and his followers have dutifully continued to subscribe to this view. Durkheim (equally combative) initiated the now-common sociological conviction that the contents of a person's mind are socially constructed. Later, synthesizers tried to splice the two together by creating psychoanalytic sociology, psychoanalytic anthropology, psychohistory, and so forth. More recently, there has been some critical interpretation of the cultural significance of psychoanalysis—for example, in the powerful work of Philip Rieff. However, others have said that the more salient issue of territory lies behind these efforts. Each insists that it will provide contemporary thought with the correct and decisive vision of the individual's relation to society. So, these two have created their own special kind of *Methodenstreit*, and that has forestalled creative thinking and ennerverted thoughtful discussion.

Edith Kurzweil says that her book is a sociological study (because she uses a comparative perspective) of psychoanalysis (on the Freudians). I found it extremely interesting, ably executed, fresh and original—a rewarding "read," as the newspapers say. I also think that it is so because it focuses entirely on fresh data derived from a great variety of sources, while deftly passing over the familiar strife about method. Still, the specter of method stubbornly remained just behind my shoulder, as if to ask at the end, What kind of a book is this? Sociology? History? and so forth. Alas, I could not give a decisive answer.

The author's primary question is: How and why did psychoanalytic ideas penetrate, in only 50 or so years, into every aspect of modern, Western culture? Her answer is: gifted and talented people, located in major institutional contexts—contexts powerfully shaped by national traditions of thought, feeling, experience, and appreciation—each took the same Freud, cast it in their unique national idiom and then transformed those very same institutions in a fresh and unmistakably Freudian way. The interpretive principle that allows Kurzweil to link a distinctive reading of Freud with its equally distinctive national style is the idea of a "cultural unconscious." The concept derives, not from Freud, or Jung, or Lévi-Strauss, but Mannheim. To all of this one could reasonably say, a simple question gets a simple answer—have not many others tried all of these before? My sense of it is, yes, but not quite.

What distinguishes this book from others is the breadth, depth, and particularity of the data the author has unearthed and that she then organizes around a number of topics or themes, and it is these latter that are "simple," in the sense that they have appeared again and again in most of the major books on psychoanalysis. The sources for these data are: histories, biographies, psychobiographies (and in some cases personal conversations with the authors); the published writings of the leading Freudians (books, articles, letters); minutes of meetings of many local, national, and international psychoanalytic organizations and institutes (and sometimes discussions with their librarians). Add to this the fact that Kurzweil is also fluent in French, German, and Italian. She has read extensively in the "everyday" literature of each of the major "psychoanalytic countries," and not only the best-known theories and controversies. Her mastery of these literatures in this book exceeds that in all the studies of the origin and development of psychoanalysis that I have seen.

The topics or themes are: first, the initial response to Freud's writings and to those of his early followers; second, the subsequent institutionalization of psychoanalysis in medicine, in education (primary and secondary schools), in the universities (chiefly in departments of English or French literature), in the women's movement, and in the academic criticism of literature; and third, the consequences of such institutionalization for the several national cultures in the post-World War II period, especially the German and French. For example, Kurzweil shows in detail how some German analysts opposed the Nazis while others joined them, and how analysts like Alexander Mitscherlich turned psychoanalysis into a major social force that could heal (even redeem) German postwar guilt, whereas in France, Jacques Lacan single-handedly turned psychoanalysis into a dominant form of political radicalism that then made its way into virtually every aspect of French intellectual, political, and everyday life.

Kurzweil's references to a cultural unconscious linking national ways of life to a particular type of psychoanalytic theory or practice or internal organization remain completely undeveloped, but readers can actually turn this omission into an advantage, if they wish. Kurzweil's data are

so specific and so rich that a reader can reflect afresh and without constraint on the very idea of a cultural unconscious. Although an old and despised concept that many have abandoned entirely, it still refuses to disappear from the scene entirely—a little like the proverbial stroller who cannot escape his shadow, at least as long as the sun continues to lighten his path.

Demography and Degeneration: Eugenics and the Declining Birthrate in Twentieth-Century Britain. By Richard A. Soloway. Chapel Hill: University of North Carolina Press, 1990. Pp. xix + 443. \$45.00.

Douglas L. Anderton
University of Massachusetts—Amherst

We build asylums for the imbecile, the maimed, and the sick;
we institute poor-laws; and our medical men exert their utmost
skill to save the life of every one to the last moment. . . . Thus
the weak members of civilized societies propagate their kind.

[CHARLES DARWIN, *The Descent of Man*, 1871]

The eugenic pursuits of Francis Galton, Karl Pearson, G. U. Yule, W. F. R. Weldon, R. A. Fisher, Alfred Marshall, J. M. Keynes, and other prominent 18th- and 19th-century scientists ensured the presence of eugenic issues in the foundations of contemporary science. Current newspapers, newscasts, and legislatures testify to the pervasive influence of eugenics in popular culture. It is not surprising, then, that Soloway's historical account of the eugenics movement stirs deep emotions and a strong sense of contemporary relevance.

Galton's choice of the term "eugenics" from the Greek *eugenes*, meaning noble in heredity, reveals the sentiments of class quality embodied in the movement. Soloway begins by noting that the Lamarckian 18th-century British popular mind already possessed three basic ingredients of eugenic reasoning: a fixation on class, a simplistic assumption that like begets like, and a belief in biological evolution and fitness. Fueling the eugenic fire was a sense of class imperilment in the face of a successful birth-control movement that had resulted in a disproportionate decline in heirs among the upper class. Paradoxically, as Soloway notes, Galton's Eugenics Society was to represent a "treasury of human inheritance," yet members on average had less than 2.3 offspring and over 25% of the leadership was childless. Meanwhile, the higher fertility of the lower class was viewed as a product of ignorance and selfishness. Even those who, like Pearson, applauded neo-Malthusian fertility reductions lamented the resultant loss of "national vigor."

Eugenicists clashed sharply with the advocates of the egalitarian movements of 18th-century society. Pearson and J. S. Mill, for example, both recognized the contradiction between democratic values and eugenic co-

ercion, yet noted the potential for socialist states to restrict childbearing. Soloway excels in recounting difficulties of reconciling eugenicist "needs of the race" with the rising "woman question." Galton, through flawed genealogical surveys, went so far as to "demonstrate" the lesser value of feminine contributions to heredity. Few of his disciples, however, followed Galton's course as new Mendelian methodology supported a more equal contribution of the sexes to offspring. For the eugenicists, feminism and neo-Malthusianism formed a common opposition threatening the dominance of the British race. Eugenicist desires to persuade "race mothers" to bear sufficient offspring to offset class fertility differentials faded only with World War I and enfranchisement of women.

To eugenicists, the war brought further devastation of the race. Soloway details efforts between the wars to reconstruct the race, from drafting timetables for genetic recovery to demanding hereditary potential be used in determining disability pensions. Under persistent influence from members and birth-control advocates, the Eugénics Society ultimately became deeply enmeshed in providing birth control. Eugenicist race reconstructionism, however, remained focused on the upper class, with fertility limitation promoted among the lower class.

Political realities and declining class differentials in birthrates tempered wartime eugenics. However, the depression between the wars, the looming prospect of another war, and simplistic population projections fueled a new depopulation scare. Through the looking glass of race suicide, depopulationist fears remained class specific and eugenicists had little difficulty continuing contraceptive assistance to the lower class despite a revitalized contempt for feminism. Soloway recounts how eugenicists, in the guise of depopulationists, again confronted neo-Malthusian criticisms of lax scientific methodologies. Eugenics emerged, nonetheless, well entrenched in the new science of demography.

British advocacy of marriage loans and baby bonuses paralleled compulsory, punitive sterilization laws and anti-Semitism in Nazi Germany, embarrassing eugenicists at the same time many of them watched with hopeful anticipation. World War II and rising birthrates temporarily preempted depopulationist concerns. Ultimately, despite political successes within the Royal Commission on Population, support for eugenics was weakened by post-Nazi ethical concerns, developments within genetics, and rising fertility. Soloway concludes that fundamental changes in the popular mind led eugenics to fade into comparative obscurity, where it remains latent in modern culture, possibly to reemerge in a different environment sanctified by a science rooted in common origins.

Soloway's skeptical conclusion perhaps understates the role of emerging science itself in constantly challenging eugenics. Substantial evidence can be mustered to demonstrate the begrudging resilience of eugenic influence in the popular mind.

Perhaps to avoid imposing the present on the past, Soloway's organization of the text is less cohesive than one could hope for. The transition

from intellectual to political accounts, for example, is a product of the times. In addition, Soloway, unfortunately, appears not to have anticipated classroom use; his lengthy text unwinds its tale slowly in a somewhat disorderly fashion. A careful selection of passages, however, could prove exciting in the classroom. Meanwhile, the text rewards the more dedicated reader.

Rural and Small Town America. By Glenn V. Fuguitt, David L. Brown, and Calvin L. Beale. New York. Russell Sage Foundation, 1989. Pp. xxvii + 471 \$55.00.

Leif Jensen

Pennsylvania State University

One of the great strengths of the 1980 U.S. Census Monograph Series is the expertise the authors have brought to their respective volumes. *Rural and Small Town America* is exemplary in this regard. Drawing on a collective pool of nearly a century of research experience in rural demography, Glenn Fuguitt, David Brown, and Calvin Beale provide a comprehensive sociodemographic portrait of rural America. Because of its impressive breadth and clarity, their book will surely be a key resource for rural scholars and policymakers for years to come.

The analysis is based primarily on the Public Use Samples of the U.S. censuses of 1960, 1970, and 1980, although the Current Population Surveys and other published sources allow the authors to extend trend data forward and backward. Their treatment is highly descriptive, replete with 181 lucid and informative tables, charts, graphs, and maps. Most of these tables offer comparisons between metropolitan (metro) and non-metropolitan (nonmetro) areas, and several subdivide these areas into rural and urban components. This fourfold geographic typology produces some of their most interesting findings.

A theme that runs throughout most of the book's 13 chapters concerns converging, but persisting, geographic differences in many basic social, demographic, and economic characteristics. For example, poverty rates, formerly much higher in nonmetro than metro areas, now hover only somewhat higher in the countryside, owing to swifter declines in rates there. The same pattern is seen for metro-nonmetro differences in fertility trends. Convergence in this and other social indicators, the authors assert, reflects increasing social and economic integration between rural and urban America and the fact that both areas have come to be affected by many of the same social forces. Nonetheless, this theme concludes, significant differences in rural and urban populations persist—differences that need to be better recognized in policy circles.

The introduction offers a welcome description of Census Bureau geography. Specifically, it details the technical distinctions between the

metro-nonmetro and urban-rural designations. This is followed by 11 substantive chapters that fall loosely into three groups. The first group consists of two chapters that document the distribution and flow of people across space. Here the "nonmetro turnaround," a period during the 1970s when nonmetro areas began growing relatively faster than metro areas, is thoroughly explored. Chapters 4–7 describe rural and urban populations according to four basic demographic constructs: age-sex structure, race and ethnicity, household size and composition, and fertility. The next four chapters concern the economic status and activities of the U.S. population. These cover the labor force and employment, industrial structure and change, the farming population, and income and poverty. A final substantive chapter replicates many of these analyses but concentrates on the effects of size of place (with comparisons of cities, towns, and rural areas). A concluding chapter synthesizes critical findings and discusses their policy implications.

Being descriptive in nature, *Rural and Small Town America* inherently raises more empirical questions than it can answer. Many viable thesis and research article topics can be found in its pages. For example, a more in-depth and multivariate exploration of the differences in levels and trends of social indicators across the fourfold geographic typology could both help explain these differences and provide greater insight into the meaning and implications of rural versus nonmetro residence. In addition, more needs to be known about the causes and implications of the nonmetro turnaround and its aftermath. Does it truly signal a fundamental shift away from patterns of population concentration? To what degree was it caused by quality-of-life considerations? What are the linkages between the turnaround (and rural-urban demographic shifts generally) and the presumably increasing geographic integration of the U.S. population?

There is much to praise and little to criticize in this book. I might offer some picayune complaints that the two chapters on employment and industry pay too little attention to occupational distributions and underemployment. Also, I find the chapters somewhat inconsistent in the degree to which they (1) disaggregate metro-nonmetro results according to rural-urban residence and (2) present post-1980 results using the Current Population Surveys. Finally, when demographers go to sleep at night, they like to hear three shoes drop in the apartment above. While *Rural and Small Town America* pays ample attention to fertility and migration, mortality is largely ignored. In all fairness, census data are nearly useless in this regard. Still, much as the authors used published data on induced abortions, perhaps they could have compiled a simple description of rural-urban differences in morbidity and mortality.

Accessible to a wide audience, *Rural and Small Town America* will be useful for policy analysis needing hard data to make a point, for students scrambling for a research topic, and for instructors seeking to strengthen course syllabi in demography and rural sociology.

Agents and Victims in South China: Accomplices in Rural Revolution.
By Helen F. Siu. New Haven, Conn.: Yale University Press, 1989. Pp.
378. \$37.50.

David Zweig
Tufts University

Helen Siu's excellent monograph traces the social, economic, cultural, and political development of a community in the Pearl River Delta from its roots in the Song dynasty until today. She demonstrates remarkable familiarity with this community; she visited it regularly from 1978 to 1988, read its historical records and local gazetteers, interviewed local historians, and became friends with its major players. This rich knowledge of pre- and post-1949 events permits her to highlight continuity and change over many years.

For Siu, social change results from "the working and reworking of culture and political economy through the creative, conscious actions of human beings." The socioeconomic structures people created became their bases of power while rituals surrounding these organizations taught peasants to accept the legitimacy of these structures and of the local elites who dominated them.

Historical continuity and an emphasis on conscious action by local residents allow Siu to address her main thesis—that local leaders played one of those roles in mediating state-society relations: as brokers between state and society, they possessed enough leeway to pursue their own interests, even as they partially incorporated society into the state structure; as state agents their role was to incorporate society fully into the state along lines defined by national elites. Pre-Republican institutions in the towns, such as guilds, ancestral halls, educational academies, and charity associations, which formed the social core of these rural communities, were based on lineages and controlled the local political economy. Relying on the state only for political legitimacy, they could protect local society from state intrusion, all the while serving as its local functionaries. Only in the Republican period did these relationships change as a weakened economy allowed predatory "local bullies" to replace the more humane entrepreneurs or managers of local estates who had ruled the area for centuries.

The victory of the Chinese Communist party (CCP) changed the role of local elites. New local agents created socioeconomic structures that increased the communist state's ability to direct social change. Totally dependent on the state for their income, legitimacy, and power, local cadres, who rose to power during state-run campaigns, transformed state-society relations and incorporated society fully into the state's political and economic structures. Because neither they nor the peasants could resist CCP demands, argues Siu, the result was a set of policies that harmed the local economy and destroyed the rich heritage of social life.

Thus Siu challenges one view in the literature, that which emphasizes the similarities between pre- and postrevolutionary local elites. Yet her view of local party officials as complete state lackeys is overstated. No doubt for land reform, collectivization, and the "grain first" policy of the late 1960s and early 1970s, implementing was widespread. But land reform had some popular support, even for the grain first policy, as well as for other policies in other regions of China. My work and the work of others, such as Jean Oi, suggest that local leaders resisted certain state policies that harmed local interests, creating a ritualized form of the policy even as they avoided the policy's destructive content. Siu's informants, such as one who reported that, when the upper levels pressed him to implement unpopular policies in the late 1960s, he "at least made everyone go through the motions" (p. 242), suggest that Siu understated the local cadres' ability to evade policy.

Siu's excellent discussion of the growth of rural enterprises—a topic of great significance today in China—enriches our understanding of how these firms affect people's lives. She carefully documents the state's role in promoting these enterprises. Still her encapsulation of the reform period as one of "state involution" lacks empirical specificity and a clear definition of terms and adds little to our appreciation of the reforms. Similarly, summaries at the end of each chapter sometimes find far more meaning in the events described than the text warrants.

Siu's book is a must for all students of rural China. Her discussion of how entire lineages first settled on newly constructed fields in the sands and then, over decades, moved into the towns to become new local elites deserves special attention from sociologists and anthropologists outside the China field as well. Few authors traverse such broad historical ground with the depth and sensitivity of Helen Siu, and we are indebted to her for sharing this labor of love with us.

Land, Labor and the Origins of the Israeli-Palestinian Conflict, 1882–1914. By Gershon Shafir. Cambridge: Cambridge University Press, 1989. Pp. xvi + 288. \$44.50.

John Foran
University of California, Santa Barbara

Gershon Shafir has provided us with a welcome addition to the historical sociology of the Middle East conflict. Working in an area of the discipline (Middle East studies) that has made too few conceptual contributions to the field, Shafir sets up a complex agenda and delves deeply into available empirical materials to make his points. In the process he revises a good deal of accepted Israeli academic scholarship, while using wide comparative examples to bolster his arguments, even if theoretical issues are ultimately not advanced very far.

The key empirical questions addressed by the book are three: (1) What were the actual activities of the Eastern European Jewish agricultural workers of the second aliyah (wave of immigration) of 1904–14? (2) What were the tasks of state and nation (i.e., ethnic identity) formation? (3) What were the social origins of the Israeli-Palestinian conflict? Along the way a number of theoretical debates are engaged: critiques of functionalist and elite theories on Israel; tests and confirmations of views from dependency theory and split labor markets; comparative issues of European settlement and colonization; and, underpinning all of this, an argument about the material roots of cultural analysis. The method is solidly historical and comparative, drawing on numerous primary and secondary sources in English and Hebrew and on telling comparisons with North Africa, Australia, North America, and South Africa.

Ultimately, perhaps inevitably, Shafir does not measure up to his avowed conception of historical sociology as “an integrated enterprise of historically grounded theory formation” (p. xii). Though some theory testing and tentative new directions appear along the way, the book reads more like a revision of Israeli historiography through the use of sociological categories. Shafir is forceful in his critique of the dominant views in Israeli scholarship that are embodied in S. N. Eisenstadt’s emphasis on values and ideology in shaping state and society. Most works emphasize only the interaction of Jewish groups and focus on the British mandate period of the 1920s to the 1940s. As opposed to these views, Shafir insists on the need to study production issues, organizational capacities, and economic interests as the larger setting that informs ideology and politics. His great contribution is to demonstrate how experiments with problems of land acquisition and the composition of the labor force contributed to the shaping of the future Israeli state in the period before 1914. Faced with limits to the amount of land that could be purchased by Jewish planters, the workers of the second aliyah attempted to “conquer labor” by monopolizing the labor market for themselves. By 1908, Jewish workers controlled skilled agricultural tasks (thus they split the labor market the way the French settlers did in North Africa) but did not make high enough wages to reproduce a “European” standard of living for themselves. The alternative of bringing in Yemeni Jews as cheap labor also failed but affected later social structure by planting the roots of the relative marginalization of *misrahi* (North African and Middle Eastern) Jews in Israeli history and society. Only after 1910 did the emergence of the cooperative settlement (later the kibbutz) furnish an unintended solution to effective Jewish colonization and Israeli state formation. The kibbutz simultaneously provided collectively owned land for settlement, higher living standards for the rural working class, and made increases in the Jewish population possible. By excluding Arab labor, it put the stamp of a nationalist reality on the socialist ideal, and, in terms of state formation, it linked the Histadrut labor movement to the World Zionist Organization as the pillars of the future state. Labor nationalism would

be somewhat moderate in its territorial demands in consequence of its prediction on exclusively Jewish labor.

The book has several strengths. Its revisions of previous work on Israel are based on sound and detailed scholarship. In particular, an intriguing argument about culture is carried on with functionalists (and now the new cultural historians) to the effect that cultural difference is intelligible only when more broadly situated within underlying social relations (although the author goes too far in a materialist/structuralist direction). The comparative passages, interestingly often suggested by historical contemporaries, help locate Jewish settlement in the larger context of European colonialism and colonization efforts. Shafir makes another contribution by elucidating the roots of the Israeli-Palestinian conflict, although he places far too much emphasis on Jewish labor and nationalism to tell the full story. On the negative side, his chapter on dependent development in Ottoman Palestine is not a rigorous application of theory, although his insistence in it on the *process* nature of dependency is suggestive, if schematic. Nor does any clear picture of social structure emerge from his comments on Middle Eastern "social hierarchy" (again, in part the result of his leaving out the Palestinian side of the story). Similarly, there is virtually no discussion of gender in the book.

These reservations duly noted, it is to be hoped that this book will reach its audiences. Historical sociologists of the Middle East and sociologists working on issues of nationalism, colonialism, labor markets, and settlement societies will all benefit from this work.

Aldine de Gruyter

N O W A V A I L A B L E

The Myth of the Madding Crowd

Clark McPhail (*University of Illinois*)

1991. xxx + 265 pp. 0-202-30424-8 Cloth \$44.95. 0-202-30375-6 Paper \$21.95

A major contribution to the study of collective behavior, with implications for social movement analysis, this volume presents a critical assessment of the major theories of crowd behavior, a new characterization of temporary gatherings, and a new explanation for various ways in which purposive actors construct collective actions.

Discursive Acts

R.S. Perinbanayagam (*Hunter College, CUNY*)

1991. xli + 211 pp. 0-202-30366-7 Cloth \$36.95. 0-202-30367-5 Paper \$18.95.

Focusing on the significance of symbolic communication in human behavior, the author describes the interrelation of conversation and self-concept and the interpretive processes inherent in discourse, and explains the interaction between emotions and the rule structures of conversation.

Media Worlds in the Era of Postjournalism

David L. Altheide (*Arizona State University*) and

Robert Snow (*Arizona State University*)

1991. Approx. 288 pp. 0-202-30376-4 Cloth \$47.95. 0-202-30377-2 Paper \$19.95

In this fascinating study, the authors expand their analysis, first introduced in *Media Logic* (1979), of how organizational considerations promote a distinctive media logic. Drawing upon case studies and examples of the mass media presentation of various types of events over the past twenty years, the authors illustrate and analyze the influence of media logic on society's perceptions and judgments of issues and the impact of that logic on public opinion, culture, and social institutions.

Hollywood Shot by Shot: Alcoholism in American Cinema

Norman K. Denzin (*University of Illinois*)

1991. Approx. 320 pp. 0-202-30344-6 Cloth \$39.95. 0-202-30345-4 Paper \$22.95

An insightful cultural, historical, and interpretative study of the representation of American alcoholics and their families in American cinema. The author, in his intensive examination of films and societal reaction to them, provides a greater understanding of how a cultural industry shapes public and private consciousness.

Abused and Battered: Social and Legal Responses to Family Violence

Dean Knudsen (*Purdue University*) and J. L. Miller (*Purdue University*)

1991. Approx. 304 pp. 0-202-30413-2 Cloth \$43.95. 0-202-30414-0 Paper \$21.95

Representing the leading perspectives in public health, law, criminal justice, psychology, and sociology, contributors to this volume examine the implications of the legal and social responses to spousal and child abuse cases and suggest innovative strategies for addressing the problems resulting from this abuse.

Prices are subject to change.



Aldine de Gruyter (a division of Walter de Gruyter, Inc.)

200 Saw Mill River Road • Hawthorne, New York 10532

Social

NEW FROM CALIFORNIA

Feminine Sentences

Essays on Women and Culture
JANET WOLFF

These essays challenge the continuing separation of sociological from textual analysis in cultural (and feminist) theory and inquiry. This is an original discussion of women's relationship to modern and postmodern culture.

\$35.00 cloth, \$12.95 paper

Scientific Growth

Essays on the Social Organization and Ethos of Science
JOSEPH BEN-DAVID

Edited with an Introduction by Gad Freudenthal

"A superb collection of brilliant papers by a pioneering mind of international fame, who did much to shape the sociology of science." —Robert K. Merton, Columbia University

California Studies in the History of Science \$60.00

Beyond Belief

Essays on Religion in a Post-Traditional World

ROBERT N. BELLAH

New in paper—"Most sociologists would not be brave enough to reveal the connection between their own deepest personal fears and longings of their professional work. . . . But Bellah carries it off superbly."

—*American Journal of Sociology*

\$12.95 paper

Rethinking Popular Culture

Contemporary Perspectives in Cultural Studies

Edited by CHANDRA MUKERJI and MICHAEL SCHUDSON

Rethinking Popular Culture selects some of the best and most important recent work analyzing popular culture. The essays break down disciplinary boundaries in a fresh and innovative fashion.

\$49.95 cloth, \$15.95 paper

Prime-Time Families

Television Culture in Post-War America

ELLA TAYLOR

New in paper—"This focus on a major genre of television represents the new communications research that is attempting to bridge humanistic and sociological perspectives."

—*American Journal of Sociology*

\$11.95 paper

Hard Core

Power, Pleasure, and the "Frenzy of the Visible"

LINDA WILLIAMS

New in paper—"A brilliant demolition of the position that pornography represents one thing only. . . . Williams urges that we take pornography seriously."—*The New Republic*

\$12.95 paper

At bookstores or order toll-free 1-800-822-6657. Visa & MasterCard only.

University of California Press • Berkeley 94720

Call for Papers

HARVARD ARCHITECTURE REVIEW #11

The *Harvard Architecture Review* is an international publication produced by students of the Harvard Graduate School of Design. The editors of issue #11 are seeking articles which address innovation and consumption in American architecture. The committee is interested in viewpoints proposed by non-architects, especially by artists, real estate developers and sociologists. The anthology will examine the conflict between the aspirations of the architect, the needs of the general public, and the goals of a market economy.

An initial one-page abstract should be sent to the editorial committee by no later than April 15, 1991. Authors of selected abstracts will be asked to submit a complete article by August 1, 1991. We request that all writing be unencumbered by jargon that would make the material inaccessible to a design profession audience. Supporting graphics are recommended. Interested parties should request a complete editorial statement and further information from the editorial office.

American architecture : Innovation and Consumption #11
The Harvard Architecture Review #11
Harvard Graduate School of Design
48 Quincy Street
Cambridge, MA 02138
USA
Fax No (617) 495-8916

**Copies of articles from this
publication are now available from
UMI Article Clearinghouse.**

**For more information about the
Clearinghouse, please fill out and mail back
the coupon below.**

The UMI Article Clearinghouse offers articles from more than 11,000 copyright-cleared periodicals in a wide range of subjects. You can place your orders electronically, as well as by phone, mail, and telefacsimile. For more information, please complete and mail this coupon to UMI Article Clearinghouse, 300 North Zeeb Road, Box 11, Ann Arbor, MI 48106 USA. Or call toll-free for an immediate response: 800-521-0600. From Alaska and Michigan call collect 313-761-4700. From Canada, call toll-free 800-343-5299.

YES! I'd like to know more about UMI Article Clearinghouse.

Name _____

Title _____

Company/Institution _____

Address _____

City/State/Zip _____

Telephone (_____) _____

U·M·I

A Bell & Howell Company
300 North Zeeb Road
Ann Arbor, MI 48106 USA

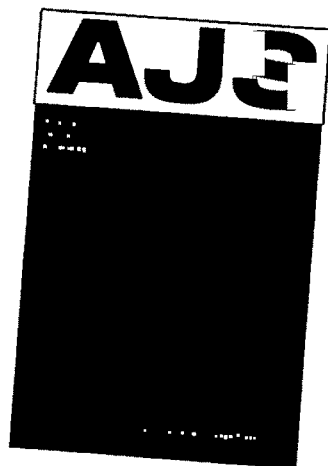
If you're the sort of reader who needs

American Journal of Sociology

ask yourself these questions . . .

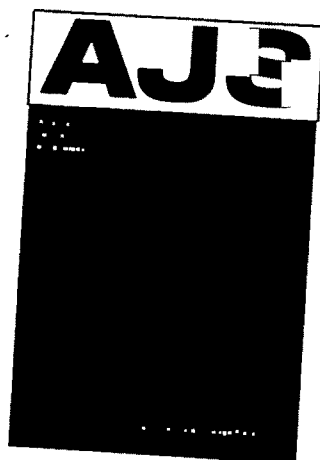
Q ■ How can you keep track of important research, yet make more efficient use of your time in the library?

A ■ By entering your personal subscription now, using the order form on reverse.



Q ■ How can you keep your collection of journals complete and avoid missing a single issue?

A ■ By renewing your subscription now, using the order form on reverse.



No other journal covers the field like

American Journal of Sociology

ENTER A NEW SUBSCRIPTION AND SAVE 15%!

- ☐ Individuals
☐ Institutions
☐ Students
☐ ASA and BSA Members

New	Renewal
<input type="checkbox"/> \$29.00 (J)	<input type="checkbox"/> \$35.00
<input type="checkbox"/> 59.00 (J)	<input type="checkbox"/> 70.00
<input type="checkbox"/> 21.00 (J)	<input type="checkbox"/> 25.00
<input type="checkbox"/> 30.00	<input type="checkbox"/> 30.00

OUTSIDE USA? Please add \$9.00 for postage.

BACK ISSUES AT 50% OFF:

- ☐ Set of 25 available issues: ☐ Individuals \$87.50 ☐ Institutions \$159.40

OUTSIDE USA? Please add 75¢ per copy for postage.

- ☐ **Charge my** ☐ **Visa** ☐ **MasterCard** Exp. date _____
 Acct. # _____
 Signature _____
☐ **Check** enclosed (payable to journal)

Name _____
 Address _____
 City _____
 State/Country _____ ZIP _____

Please mail to **The University of Chicago Press, Journals Division,**
P.O. Box 37005, Chicago, IL 60637.

IXIXX

American Journal of Sociology

ENTER A NEW SUBSCRIPTION AND SAVE 15%!

- ☐ Individuals
☐ Institutions
☐ Students
☐ ASA and BSA Members

New	Renewal
<input type="checkbox"/> \$29.00 (J)	<input type="checkbox"/> \$35.00
<input type="checkbox"/> 59.00 (J)	<input type="checkbox"/> 70.00
<input type="checkbox"/> 21.00 (J)	<input type="checkbox"/> 25.00
<input type="checkbox"/> 30.00	<input type="checkbox"/> 30.00

OUTSIDE USA? Please add \$9.00 for postage.

BACK ISSUES AT 50% OFF:

- ☐ Set of 25 available issues: ☐ Individuals \$87.50 ☐ Institutions \$159.40

OUTSIDE USA? Please add 75¢ per copy for postage.

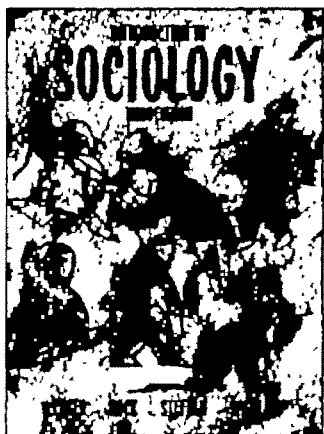
- ☐ **Charge my** ☐ **Visa** ☐ **MasterCard** Exp. date _____
 Acct. # _____
 Signature _____
☐ **Check** enclosed (payable to journal)

Name _____
 Address _____
 City _____
 State/Country _____ ZIP _____

Please mail to **The University of Chicago Press, Journals Division,**
P.O. Box 37005, Chicago, IL 60637.

IXIXX

Exceptional Quality and Selection for 1991 from HBJ



INTRODUCTION TO SOCIOLOGY

Third Edition

LEWIS A. COSER

State University of New York at Stony Brook

STEVEN L. NOCK and

DAPHNE SPAIN

both of the University of Virginia

PATRICIA A. STEFFAN

SOCIAL TRENDS

Change and Continuity in American Society

THEODORE CAPLOW

University of Virginia

Paperbound, 1991

CRIMINOLOGY

PIERS BEIRNE and

JAMES MESSERSCHMIDT

both of the University of Southern Maine

Hardcover, 1991

THE FOREST FOR THE TREES

An Introduction to Sociological Thinking

ALLAN G. JOHNSON

Hartford College for Women

Paperbound, 1991

THE MODERN RESEARCHER

Fourth Edition

JACQUES

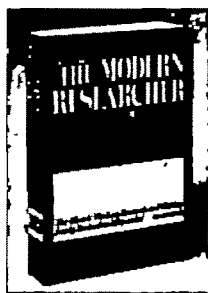
BARZUN and

HENRY F.

GRAFF *both of*

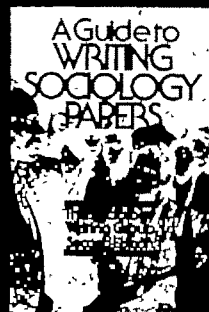
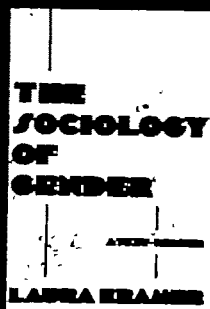
Columbia University

Paperbound, 1985



HBJ **HARCOURT
BRACE
JOVANOVIH, INC.**
College Sales Office
7555 Caldwell Avenue
Chicago, IL 60648
(708) 847-8822

Diverse Perspectives in Sociology



Extraordinary Groups

THE SOCIOLOGY OF THE UNCONVENTIONAL LIFESTYLES

Fourth Edition

WILLIAM M. FINKEL, *University of Pennsylvania*

WILLIAM W. ZITTEL, *University of Maryland*

Paperbound, 384 pages, Post Paid \$16.95

The Sociology of Gender

A GUIDE TO THE AREA

LAURA KRAMER, *University of South Carolina*

Paperbound, 272 pages, Post Paid \$16.95

A Guide to Writing Sociology Papers

Second Edition

THE SOCIOLOGY WRITING GROUP, *University of California, Los Angeles*

First Edition

JUDITH H. P. LOPRESTY, *University of Illinois*

University of Maryland

Paperbound, 124 pages, Post Paid \$16.95

These popular, comprehensive guides to writing the sociology paper are the most widely used guides in the field. They are available in paperback and hardcover. Each book is available with a separate manual on writing the sociology paper, which contains a complete guide to the writing process, including a sample paper and a sample thesis statement. Each book is available with a separate manual on writing the sociology paper, which contains a complete guide to the writing process, including a sample paper and a sample thesis statement.

ST. MARTIN'S PRESS
College Division, Department BR
175 Fifth Avenue, New York, N.Y. 10010

AJS

100010

American
Journal
of Sociology
Volume 96 Number 6
May 1991

The Two-Letter Organization and Party Growth — *William
G. Sumner*
Gender Integration in the California Civil Service, 1979-1986 —
Baron, Mithras, and Newman

The Ghetto and Ghettos: A Review — *Lincoln and Samuels*
Functions of Crime: A Functional Process — *Liska and Warner*

Why Your Friends Have More Friends than You — *Ford*
Historical Foundations for Controlling Migration — *Felton*

From Wilbur to Pay for Higher Education —
Stewart and Power

The University of Chicago Press

WILLIAM L. PARISH, Editor

WAYNE BAKER, JULIE E. BRINES, and NADER SOHRABI, Associate Editors

WENDY GRISWOLD, DANIEL BRESLAU, and JOLEEN KIRSCHENMAN,
Book Review Editors

STEPHEN J. ELLINGSON, JASON B. JIMERSON, SUNHWA LEE, ZAI
LIANG, and MICHAEL J. REYNOLDS, Associate Book Review Editors

SUSAN ALLAN, Managing Editor

JANE MATHER, Editorial Assistant

Consulting Editors ANDREW ABBOTT • RONALD AMINZADE • NICOLE
WOOLSEY BIGGART • FRED BLOCK • JAMES BURK • GLENN R. CARROLL • RAN-
DALL COLLINS • DANIEL B. CORNFIELD • PAUL DIMAGGIO • ROBERT R. FAULK-
NER • MARCUS FELSON • ROBERTO M. FERNANDEZ • GARY GEREFFI • BARRY
MARKOVSKY • MEREDITH B. MCGUIRE • ELEANOR M. MILLER • RUTH MILK-
MAN • MARK S. MIZRUCHI • EWA MORAWSKA • S. PHILIP MORGAN • CHANDRA
MUKERJI • TOBY L. PARCEL • TONY TAM • JACKSON TOBY • ANDREW H. VAN
DE VEN • ANDREW G. WALDER • PAMELA BARNHOUSE WALTERS • LAWRENCE
WU

International Consulting Editors MARIA CARMELA AGODI (Italy) • GÖSTA
ESPING-ANDERSEN (Italy) • MARGARET ARCHER (England) • LUC BOLTANSKI
(France) • TOM COLBJØRNSEN (Norway) • GIORGIO GAGLIANI (Italy) • GUDMUND
HERNES (Norway) • PAOLO JEDLOWSKI (Italy) • YONG-HAK KIM (Korea) • BRUNO
LATOUR (France) • CARMEN LECCARDI (Italy) • JOHN MYLES (Canada) • OSVALDO
PIERONI (Italy) • WERNER RAUB (The Netherlands) • NORIKO O. TSUYA (Japan)

Editorial Board C. ARNOLD ANDERSON • GARY S. BECKER • CHARLES E. BIDWELL •
DONALD J. BOGUE • MARY C. BRINTON • TERRY NICHOLS CLARK • JAMES S. COLEMAN •
JOHN L. COMAROFF • GEORGE STEINMETZ • PHILIP M. HAUSER • EVELYN KITAGAWA •
NANCY LANDALE • EDWARD O. LAUMANN • DONALD N. LEVINE • DOUGLAS S. MASSEY •
JOHN F. PADGETT • EDWARD SHILS • FRED L. STRODTBECK • GERALD D. SUTTLES • MARTA
TIENDA • WILLIAM J. WILSON

THE AMERICAN JOURNAL OF SOCIOLOGY (ISSN 0002-9602) is published bimonthly in July, September,
November, January, March, and May by The University of Chicago at The University of Chicago Press,
Journals Division, P.O. Box 37005, Chicago, Illinois 60637. Subscription rates, U.S.A.: institutions, 1 year
\$70.00, individuals, 1 year \$35.00. Student subscription rate, U.S.A.: 1 year \$25.00 (photocopy of valid
student ID must accompany subscription). ASA and BSA members, 1 year \$30.00. All other countries add
\$9.00 for each year's subscription to cover postage. Subscription agent for Japan: Kinokuniya Company, Ltd.
Single copy rates: institutions \$11.75, individuals \$6.00. Back issues available from 1982 (vol. 88). Volumes
in microfilm available from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michi-
gan 48106, and Kraus Reprint and Periodicals, Route 100, Millwood, New York 10546. Subscriptions are
payable in advance. Subscriptions will be entered to start with the first issue to be published after receipt of
order. *Claims for missing numbers* should be made within the month following the regular month of publica-
tion. The publisher expects to supply missing numbers free only when losses have been sustained in transit
and when the reserve stock will permit. *Postmaster*: Send address changes to The University of Chicago Press,
Journals Division, P.O. Box 37005, Chicago, Illinois 60637.

ADVERTISING space in THE AMERICAN JOURNAL OF SOCIOLOGY is available, as is rental of its subscriber
list. For information and rates, please contact the advertising sales staff, The University of Chicago Press,
Journals Division, 5720 South Woodlawn Avenue, Chicago, Illinois 60637, phone (312) 702-8187 or 702-
7361. Advertising and list rental is limited to material of scholarly interest to our subscribers.

Copying beyond Fair Use. The code on the first page of an article in this journal indicates the copyright
owner's consent that copies of the article may be made beyond those permitted by Section 107 or 108 of the
U.S. Copyright Law provided that copies are made only for personal or internal use or for the personal or
internal use of specific clients and provided that the copier pay the stated per-copy fee through the Copyright
Clearance Center, Inc. Operations Center, 27 Congress St., Salem, Massachusetts 01970. To request permis-
sion for other kinds of copying, such as copying for general distribution, for advertising or promotional
purposes, for creating new collective works, or for resale, kindly write to Permissions Department, The
University of Chicago Press, 5801 S. Ellis Ave., Chicago, Illinois 60637. If no code appears on the first page
of an article, permission to reprint may be obtained only from the author. Second-class postage paid at
Chicago, Illinois, and at additional mailing offices.

© 1991 by The University of Chicago. All rights reserved.

The paper used in this publication meets the minimum requirements of American National Standard for
Information Sciences—Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984. ☺

AJS

American Journal of Sociology

Volume 96 No. 6 May 1991

CONTENTS

- 1327 The Two Lefts? Occupation and Party Choice in France, Italy,
and the Netherlands
DAVID L. WEAKLIEM

- 1362 Targets of Opportunity: Organizational and Environmental
Determinants of Gender Integration within the California Civil
Service, 1979-1985
JAMES N. BARON, BRIAN S. MITTMAN, AND ANDREW E.
NEWMAN

- 1402 The Sutherland-Glueck Debate: On the Sociology of Criminologi-
cal Knowledge
JOHN H. LAUB AND ROBERT J. SAMPSON

- 1441 Functions of Crime: A Paradoxical Process
ALLEN E. LISKA AND BARBARA D. WARNER

- 1464 Why Your Friends Have More Friends than You Do
SCOTT L. FELD

- 1478 Theoretical Foundations for Centrality Measures
NOAH E. FRIEDKIN

- 1505 Sponsoring the Next Generation: Parental Willingness to Pay for
Higher Education
LALA CARR STEELMAN AND BRIAN POWELL

Commentary and Debate

- 1530 Assessing the Risk of Inattention to Class, Race/Ethnicity, and
Gender: Comment on Lyng
ELEANOR M. MILLER

- 1534 Edgework Revisited: Reply to Miller
STEPHEN LYNG

- 1539 Comment on Siegelman's Review of *Auctions*
CHARLES W. SMITH
- 1540 Reply to Smith
PETER SIEGELMAN

Book Reviews

- 1542 *The Impossible Science: An Institutional Analysis of American Sociology* by Stephen Park Turner and Jonathan H. Turner
CHARLES CAMIC
- 1544 *Social Entropy Theory* by Kenneth D. Bailey
THOMAS F. MAYER
- 1546 *Nuts and Bolts for the Social Sciences* by Jon Elster
MARK GOULD
- 1549 *Science as Power: Discourse and Ideology in Modern Society* by Stanley Aronowitz
CHANDRA MUKERJI
- 1551 *Social Control and Multiple Discovery in Science: The Opiate Receptor Case* by Susan E. Cozzens
LOWELL L. HARGENS
- 1553 *Structural Equations with Latent Variables* by Kenneth A. Bollen
ROSS L. MATSUDA
- 1555 *The Three Worlds of Welfare Capitalism* by Gösta Esping-Andersen
CLAUS OFFE
- 1557 *State Responsiveness and State Activism* by Jerald Hage, Robert Hanneman, and Edward T. Gargan
EDWIN AMENTA
- 1559 *Solidarity and the Politics of Anti-politics: Opposition and Reform in Poland since 1968* by David Ost
DANIEL H. KRYMKOWSKI
- 1561 *Challenging the Boundaries of Reform: Socialism in Burlington* by W. J. Conroy
JOHN B. HANNUM
- 1562 *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988* by Philip C. C. Huang
MARTIN KING WHYTE

150

Am 35

- 1564 *The Anti-politics Machine: "Development," Depoliticization, and Bureaucratic Power in Lesotho* by James Ferguson
BRUCE M. KOPPEL
- 1566 *Power and the Ruling Classes in Northeast Brazil, Juazeiro and Petrolina in Transition* by Ronald H. Chilcote
KATHLEEN C. SCHWARTZMAN
- 1567 *The Man-made City: The Land-use Confidence Game in Chicago*
by Gerald D. Suttles
HARVEY MOLOTCH
- 1569 *Performance as Political Act: The Embodied Self* by Randy Martin
LOÏC J. D. WACQUANT
- 1571 *Cultural Theory* by Michael Thompson, Richard Ellis, and Aaron Wildavsky
ELISABETH S. CLEMENS
- 1573 *Charisma* by Charles Lindholm
JOHN R. HALL
- 1575 *Backdoor to Eugenics* by Troy Duster
STANLEY ARONOWITZ
- 1577 *Promises in the Promised Land: Mobility and Inequality in Israel*
by Vered Kraus and Robert W. Hodge
ROBERT A. HANNEMAN
- 1579 *Two Worlds of Judaism: The Israeli and American Experiences*
by Charles S. Liebman and Steven M. Cohen
M. HERBERT DANZGER
- 1581 *Ethnic Identity and Equality: Varieties of Ethnic Experience in a Canadian City* by Raymond Breton, Wsevolod W. Isajiw, Warren E. Kalbach, and Jeffrey G. Reitz
PHILIP KASINITZ
- 1583 *Working-Class Americanism: The Politics of Labor in a Textile City, 1914-1960* by Gary Gerstle
DAVID HALLE
- 1584 *Unpacking the Fashion Industry: Gender, Racism, and Class in Production* by Annie Phizacklea
SONYA O. ROSE
- 1586 *Understanding the Gender Gap: An Economic History of American Women* by Claudia Goldin
JOAN R. ACKER

- 1587 *Informal Marriage, Cohabitation and the Law, 1750-1989*
by Stephen Parker
HAYA STIER
- 1589 *Law of Desire: Temporary Marriage in Shi'i Iran* by Shahla Haeri
MINOO MOALLEM
- 1591 *Endless Crusade: Women Social Scientists and Progressive Reform* by Ellen Fitzpatrick
MARY JO DEEGAN
- 1593 *Les philosophes de la République* by Jean-Louis Fabiani
Naissance des "intellectuels," 1880-1900 by Christophe Charle
RANDALL COLLINS
- 1596 *The Game Planners: Transforming Canada's Sport System* by Donald Macintosh and David Whitson
JAMES H. FREY
- 1598 *Charismatic Capitalism: Direct Selling Organizations in America*
by Nicole Woolsey Biggart
CHARLES W. SMITH
- 1600 *Culture Control and Commitment: A Study of Work Organization and Work Attitudes in the United States and Japan* by James R. Lincoln and Arne L. Kalleberg
CARMi SCHOOLER
- 1602 *Gay Priests* edited by James G. Wolf
BOB BLAUNER
- 1604 *Disorders of Desire: Sex and Gender in Modern American Sexology* by Janice M. Irvine
ARLENE J. STEIN
- 1606 *Women for Hire: Prostitution and Sexuality in France after 1850*
by Alain Corbin
KATHLEEN BARRY
- 1607 *Fraternity Gang Rape: Sex, Brotherhood and Privilege on Campus*
by Peggy Reeves Sanday
MICHAEL S. KIMMEL
- 1609 *A General Theory of Crime* by Michael R. Gottfredson and Travis Hirschi
CHARLES R. TITTLE

- 1611 *Chinese Subculture and Criminality: Non-traditional Crime Groups in America* by Ko-lin Chin
BERNARD N. MELTZER
- 1613 *The Search for Structure: A Report on American Youth Today* by Francis A. J. Ianni
SANFORD M. DORNBUSCH
- 1614 *Ethnic Humor around the World: A Comparative Analysis* by Christie Davies
HOWARD J. EHRLICH
- 1619 Acknowledgments to Referees
- 1623 Contents of Volume 96
- 1639 Book Reviewers for Volume 96

IN THIS ISSUE

DAVID L. WRAKLIEM is assistant professor of sociology at Cornell University. His major research interests are political sociology, labor markets, and statistical methods. He is currently studying political divisions within social classes

JAMES N. BARON is Professor of Organizational Behavior and Business School Trust Faculty Fellow for 1990–91 in the Graduate School of Business and professor of sociology at Stanford University. He is currently conducting research in the areas of economic sociology, complex organizations, and socioeconomic inequality.

BRIAN S. MITTMAN is associate social scientist at the RAND corporation, visiting associate professor at the University of California, Los Angeles, Anderson Graduate School of Management, and research associate at that university's Institute of Industrial Relations. His research activities currently include the study of organizational career mobility, internal labor markets, and organizational demography.

ANDREW E. NEWMAN is assistant professor of sociology at Ohio State University. His recently completed doctoral dissertation at Stanford University is on the institutional and organizational history of California state administration. His other research interests include the evolution of state-society relations. His background is in human resources and labor-relations management.

JOHN H. LAUB is associate professor in the College of Criminal Justice at Northeastern University and a visiting scholar at the Murray Research Center of Radcliffe College. His research interests include patterns of crime in the life course, the correlates of victimization, and the history of criminology. He and Robert Sampson are currently conducting a re-analysis of Sheldon Glueck and Eleanor Glueck's longitudinal data on juvenile delinquency and adult crime.

ROBERT J. SAMPSON is associate professor of sociology at the University of Illinois, Urbana-Champaign. His major research interests are crime and deviance, the life course, community social organization, and informal social control. In the fall of 1991, he will join the Department of Sociology at the University of Chicago.

ALLEN E. LISKA is professor of sociology at the State University of New York at Albany. He is primarily interested in the causes and consequences of macro patterns of social control, and he is currently studying how the social organization and composition of social units influences the expansion and contraction of large-scale social control programs.

BARBARA D. WARNER is an assistant professor of sociology at the University of Kentucky. Her research interests are in the community-level determinants of both crime and crime control. Her recent work examining the effects of community-level variables on the reporting of crime will appear in *The Structure and Organization of Deviance and Social Control*, edited by Allen E. Liska.

SCOTT L. FELD is professor of sociology at the State University of New York, Stony Brook. His earlier work on social networks has examined basic features of social networks, such as their origins in foci of activity and their tendencies to include large inequalities of popularity. His current work explores specific consequences of social networks for social support, social pressures, social influence, and communication. He is also continuing research (largely in collaboration with Bernard Grofman) on collective decision-making processes and on social processes that lead to violence

NOAH E. FRIEDKIN is associate professor of education and sociology at the University of California, Santa Barbara. His research interests include the sociology of education, social networks, and formal organizations. Currently he is studying the accuracy and applications of a formal theory concerned with the development of opinions and agreements in networks of interpersonal power and influence.

LALA CARR STEELMAN is associate professor in the sociology department at the University of South Carolina. Her primary research interests are in the relationship between the family and educational outcomes.

BRIAN POWELL is associate professor of sociology at Indiana University. His work centers on the educational consequences of differential family structures and parental cultural, economic, and social investment in children.

Information for Contributors

Editorial Procedures: All papers deemed appropriate for the *AJS* are sent out anonymously to readers. The editors rely heavily on the judgments of those readers, although they are not bound by them. To protect anonymity, only the title should appear on the manuscript. Attach a cover page with the title of the manuscript, your name, and your affiliation. All identifying references and footnotes should appear on a separate page. A legible, carefully prepared manuscript will facilitate the work of readers. Manuscripts are accepted for publication subject to nonsubstantive editing with the understanding that the *AJS* has the right of first publication. Submission of a manuscript to the *AJS* is taken to indicate the author's commitment to publish in this *Journal*. No paper known to be under consideration by any other journal will be reviewed by the *AJS*. Upon publication, all rights, including subsidiary rights, are owned by the University of Chicago Press. The author retains the right to use his article without charge in any book of which he is the author or editor after it has appeared in the *Journal*.

Manuscript Acceptance Policy: While it is our policy to require the assignment of copyright on most journal articles and review essays, we do not usually request assignment of copyright for other contributions. Although the copyright to such a contribution may remain with the author, it is understood that, in return for publication, the journal has the nonexclusive right to publish the contribution and the continuing right, without limit, to include the contribution as part of any reprinting of the issue and/or volume of the journal in which the contribution first appeared by any means and in any format, including computer-assisted storage and readout, in which the issue and/or volume may be reproduced by the publisher or by its licensed agencies.

Preparation of Copy

1 Type *all* copy—including indented matter, footnotes, tables, and references—*double-spaced*, allowing generous margins at top, bottom, and sides of page. Please do not break words at ends of lines or justify right-hand margins. Indicate italics by underlining only. Number all footnotes, including acknowledgement footnote (which should be "1").

2 Type each table on a separate page. Refer to each table in numerical order in the text. Prepare tables without vertical lines. Tables should not contain more than 20 two-digit columns or the equivalent.

3. Clarify all mathematical symbols (e.g., Greek letters) with words in the margins of the manuscript.

4 Draw figures on white paper with india ink. Original or glossy print of professionally drawn figure will be required if manuscript is accepted.

5. Include a brief abstract (not more than 100 words) summarizing the findings.

6. *Four copies* of the manuscript and abstract, on white paper, must be submitted. Manuscripts should be addressed to the Editor of the *AMERICAN JOURNAL OF SOCIOLOGY*, 1130 East 59th Street, The University of Chicago, Chicago, Illinois 60637. *Manuscripts are not returned to authors.* Enclose a self-addressed stamped postcard, containing the manuscript title, to obtain acknowledgment of manuscript receipt. No other acknowledgment will be sent.

7. Each article submitted to the *AJS* must be accompanied by a check or money order for \$15.00, payable to The University of Chicago Press in U.S.

currency or its equivalent by money order or bank draft. Papers will not be reviewed until this fee has been paid. The submission fee will be waived for papers solely by student authors. Submissions from students must be accompanied by a faculty member's certification of their student status. Citizens of countries with restrictions on the export of U.S. dollars may request waiver of the submission fee.

Format of References in Text: All references to monographs, articles, and statistical sources are to be identified at the appropriate point in the text by last name of author, year of publication, and pagination where appropriate, all within parentheses. Footnotes are to be used only for substantive observations. Specify subsequent citations of the same source in the same way as the first one; do not use "ibid.," "op. cit.," or "loc. cit."

1. When author's name is in the text: Duncan (1959). When author's name is not in text: (Gouldner 1963).

2. Pagination follows year of publication. (Lipset 1964, pp. 61-65).

3. For more than three authors, use "et al." For institutional authorship, supply minimum identification from the beginning of the complete citation: (U.S. Bureau of Census 1963, p. 117).

4. With more than one reference to an author in the same year, distinguish them by use of letters (a, b) attached to the year of publication: (1965a).

5. Enclose a series of references with a single pair of parentheses, separated by semicolons.

Format of References: List all items, including machine-readable data files (MRDF), alphabetically by author (providing the full list of multiple authors) and, within author(s), by year of publication, in an appendix titled "References." Examples follow:

Davis, James Allan. 1978. *General Social Survey, 1972-1978: Cumulative Data* (MRDF). NORC ed. Chicago: NORC. Distributed by Roper Public Opinion Research Center, New Haven, Conn.

Davis, K. 1963a. "Social Demography." Pp. 124-37 in *The Behavioral Sciences Today*, edited by Bernard Berelson. New York: Basic.

———. 1963b. "The Theory of Change and Response in Modern Demographic History." *Population Index* 29:345-66.

Goode, W. J. 1967. "The Protection of the Inept." *American Sociological Review* 32:5-19.

Moore, Wilbert E., and Arnold S. Feldman. 1960. *Labor Commitment and Social Change in Developing Areas*. New York: Social Science Research Council.

Sanford, Nevitt, ed. 1962. *The American College*. New York: Wiley.

U.S. Bureau of the Census. 1970. *Census of Population and Housing 1970, Summary Statistic File 4H: U.S.* (MRDF). DUALabs ed. Washington, D.C.: Bureau of the Census. Distributed by DUALabs, Rosslyn, Va.

Weber, Max. (1921) 1968. "Society's Problems." Pp. 12-16 in *Economy and Society*, edited by Guenther Roth and Claus Wittich. New York: Bedminster.

(Rev. 7/87)

Editor's Note

We remember the contribution of C. Arnold Anderson, whose death in June 1990 deprived this *Journal*—and the discipline at large—of one of its most energetic and long-standing supporters. His seven years as editor of *AJS* marked a period of tremendous growth for the *Journal*.

Anderson's ties to *AJS* were long and distinguished. His first contribution to the *Journal* appeared in March 1929 ("An Experimental Study of 'Social Facilitation' as Affected by 'Intelligence'"). While at the University of Kentucky, he served as advisory editor (1953–57). After coming to the University of Chicago in 1958, his contact with the *Journal* continued, and from 1966 through 1973 he served as editor. During that time, *AJS* grew from 800 to 1,600 published pages per year.

Many of us benefited from knowing Anderson and his work—in the classroom, through this *Journal*, or through other forms of collegial contact. In remembering him we pay tribute to the best the academic life has to offer.

The Two Lefts? Occupation and Party Choice in France, Italy, and the Netherlands¹

David L. Weakliem
Cornell University

It has recently been argued that class divisions in politics are being altered by the emergence of conflicts over nonmaterial issues. Since the main support for the new ("postmaterialist") left is in the middle class, segments of the middle class are attracted to the left, while more traditionalist working-class voters move to the right. This paper uses log-linear association models to test this argument, examining occupation and party choice in France, Italy, and the Netherlands from 1973 to 1985. While there is evidence of a post-materialist dimension, its importance is generally stable across time and cohorts. The conclusions still hold when education is taken into account. Recent political developments are better understood as a general shift in attitudes among all classes than as a change in the relative importance of different class divisions.

INTRODUCTION

Social scientists are accustomed to seeing politics in capitalist democracies as a contest over the distribution of material goods, setting a left based in the working class against a right based in the middle class. In recent years, however, this view of politics has been called into question. Many analysts have argued that social or cultural questions have become relatively more important than material issues and that traditional patterns of class voting have consequently been disrupted. The growing importance of noneconomic issues means that some members of the middle class are increasingly attracted to the left, while more traditionalist

¹ My thanks to Michael Hannan, Susan Olzak, and the *AJS* reviewers for useful comments on previous drafts, and to Ron Breiger for technical advice. The data were made available by the Inter-University Consortium for Political and Social Research and were originally collected by Jacques-René Rabier, Hélène Riffault, and Ronald Inglehart. Neither the collectors of the original data nor the ICPSR bear any responsibility for the analyses or interpretations presented here. Send requests for reprints to David L. Weakliem, Department of Sociology, Cornell University, Uris Hall, Ithaca, New York 14853.

working-class voters move to the right. I seek to test these claims by analyzing data on occupation and party choice for France, Italy, and the Netherlands from 1973 to 1985. I use the European Community Studies of Inglehart, Rabier, and Riffault (1985) and employ new methods for the analysis of cross-classified data (Gilula and Haberman 1986; Goodman 1987) that make it possible to distinguish among the dimensions of association. I find that two separate dimensions are necessary to explain voting patterns in these countries but that comparison by year and cohort indicates little change in the relative importance of these dimensions. Rather than a change in the extent or direction of class cleavages, there appears to be a general shift of all classes along the existing dimensions.

THE ASSOCIATION OF CLASS AND PARTY

Class, while never the only determinant of political behavior, has been a strong and enduring cleavage in most industrial societies. Even theorists of the "end of ideology" generally held that class divisions remained central to democratic politics. Lipset, for example, suggested that class was the distinctive political cleavage of advanced industrial society: other categories might remain important because of historical experiences, but only class divisions were *necessarily* generated by the current organization of society. In the early 1960s, Lipset stated that "as the workers have become integrated into the body politic, they have not shifted from voting socialist to backing bourgeois parties. If anything, the opposite seems to have occurred" (1964, pp. 344–45). The intensity of ideological differences between the parties might decline, but the continued existence of inequality meant that the "democratic class struggle" (Anderson and Davidson 1943; also cited in Lipset [1981], p. 230) remained in effect.

Recently, however, observers from diverse theoretical perspectives have suggested that traditional class divisions are losing force. Inglehart (1987, p. 1289), for example, speaks of the "diminishing marginal utility of economic determinism," arguing that the picture of politics as a struggle over economic inequality is suited to an age of scarcity and is consequently becoming progressively less relevant to advanced industrial societies. Material issues, he argues, are being superseded by issues related to values. Offe (1985, p. 857) proposes a similar analysis, claiming that the traditional left-right model of politics is becoming inadequate and that "a new cross-cutting dimension must be added." This new politics focuses not on material concerns but on issues of "identity and autonomy" (Offe 1985, p. 842). From a quite different point of view, Bell (1976, pp. 479–80) sees the growth of an "adversary ideology" associated with cultural modernism whose "values, centered on personal freedom, are

profoundly anti-bourgeois." Finally, there is a growing body of work on "new social movements," which in Kriesi's words "have not primarily articulated economic demands but have been more concerned with cultural issues . . . of individual autonomy and with issues related to new, invisible risks affecting people in more or less similar ways, irrespective of their social position" (1989, p. 1079). A number of terms have been applied to these movements and their values, but Inglehart's "postmaterialist" has become the most widely used, and it will be adopted here.²

The appearance of postmaterialist concerns, in these views, alters the relation between class and party. The new issues, although not directly concerned with class, are nevertheless *associated* with different classes. Inglehart argues that postmaterialist values follow from economic security and education and are consequently most prevalent in the middle class. Offe (1985, p. 832) agrees that "the paradigm of 'new politics' . . . is rooted in major segments of the new middle class." In particular, the critique of "affluence" and economic growth that is prominent in the new politics is, according to Bauman (1982, p. 176) "like few other criticisms of present-day society, . . . unambiguously a class ideology; it represents, only thinly veiled, the specific worries of the affluent middle class."

For historical reasons, the "left" is more sympathetic to postmaterialist values; in consequence, as these issues become more important, there is increasing tension between the left's traditional materialist and newer postmaterialist supporters. The implications are summarized by Lipset: "There are now two Lefts, the 'materialist' and the 'postmaterialist,' which are rooted in different classes. . . . Both Lefts are often in the same party, . . . but they have different views and interests. . . . Some workers move . . . to more conservative groupings which espouse growth, favor a competitive mobile society, and retain beliefs in traditional social values. The Left, however, picks up support from the growing ranks of the intelligentsia. Thus, the correlations between class and party voting have been reduced" (Lipset 1981, pp. 510–11).

The aim of this paper is to specify and test the preceding account of the relation between class and party. Lipset (1981, p. 505) and Inglehart (1987, p. 1297) have supported their arguments with evidence that class differences in voting have generally declined over the past few decades.

² Although there is room for argument as to whether the term is strictly accurate, the new political and social movements are often skeptical about the value of economic growth and increased material consumption. Cohen (1983, p. 97), e.g., points to "themes of limited or no-growth, anti-industrialism, rejection of the work-ethic, and hostility to over-complexity" as important to new social movements. Hence, their ideology can be seen as opposed to materialism in the usual sense, although some goals (such as environmental protection) do have a "material" component.

Yet such a trend is not decisive evidence since a growth of postmaterialism is not the only explanation for a decline in class voting, if such a decline has indeed occurred.³ The key to a better test is found in Lipset's reference to "two lefts": the argument is not that the working and middle classes are changing their positions on the traditional left-right scale, but that a new dimension of political polarization is emerging. Inglehart and Rabier (1986) maintain that political parties are beginning to adapt to the new ideological cleavage, and that we increasingly see "the post-materialist vote going to parties that have distinctive programmes tailored to post-materialist concerns" (Inglehart and Rabier 1986, p. 479). Offe (1985, p. 857) makes a similar distinction on the left, proposing "a triangular model of the political universe: the forces of the traditional left, liberal and conservative forces, and the new social movements including their . . . experiments with 'green' or 'alternative' parliamentary politics." If this argument is correct, the "new politics" left should be based primarily on the middle class, while the traditional left should continue to draw support mainly from the working class. Rather than saying merely that the overall association between class and vote should decline, we can predict a change in the exact form of association.

In a sense, the arguments proposed by Inglehart, Lipset, and Offe are not new. There have always been some middle-class members of leftist movements, and they have often been more interested in cultural or moral issues than in material ones. Conversely, claims that the working class is especially susceptible to appeals of the right on issues such as "patriotism" or opposition to minorities date back at least a century (see Hall 1987, pp. 65-70). Early empirical studies of political attitudes found that ideology had at least two distinct dimensions, economic leftism and political liberalism. Forty years ago, Berelson, Lazarsfeld, and McPhee (1954) found that positions on economic and on international and civil rights issues were virtually uncorrelated. They suggested that "this lack of relationship . . . proved to be a chronic source of difficulty for Roosevelt and Truman in rallying materially liberal workers and farmers behind symbolically liberal programs for civil rights and international relations" (1954, p. 198). Yet they also found that domestic liberalism had a much stronger relation to the vote than did international liberalism. Thus, the distinctive claim of the postmaterialist argument is not that a second ideological dimension exists, but that it is having an increasing impact on voting.

³ Another popular argument suggests that classes are becoming increasingly fragmented, so that class in general is becoming less relevant to party choice. According to this account, there is a decline in class voting, but it is caused by a growth of nonclass cleavages such as public vs. private sector rather than by new forms of class divisions (see, e.g., Dunleavy 1980).

Despite the emphasis of both authors on the growth of a new left, the postmaterialist analysis also implies a corresponding growth of a new group of conservatives primarily concerned with social and cultural issues. Most observers assume, however, that this vote is going mainly to the traditional conservative parties rather than producing new parties on the right. There is, however, no need to take a position on this question, since the methods used in this analysis estimate positions along dimensions rather than clustering groups of parties. Whether there are postmaterialist parties of the right thus becomes an empirical question.

Analysis in terms of dimensions also makes it clear that the two lefts (or two rights) are not mutually exclusive. That is, many people take leftist positions on *both* economic and cultural questions. The postmaterialist argument is about the relative importance of the different issues. If postmaterialist issues become of greater concern to most people, the parties that stress those issues will grow at the expense of the parties that continue to treat them as secondary.

This predicted change in the importance of the dimensions should be distinguished from another type of change involving general shifts along a dimension. The prediction of the postmaterialist account is that certain differences among class voting pattern (those representing the traditional left-right distinction) will decline, while others (representing the new politics) will increase. An alternative possibility is that differences among classes will remain the same but that all classes will shift along the political spectrum. In terms of statistical models, the postmaterialist argument implies the existence of interaction effects between class and period, while the alternative involves only main effects. The growth of parties representing the "new politics" could be explained by either a changing association between class and party or a uniform shift in all classes. Only the first, however, would be consistent with the postmaterialist argument. The distinction between these two accounts will be central in understanding results of the analysis reported here.

MODELS AND DATA

The association between two variables may be analyzed in many ways, but log-linear models for variables with ordered categories have some important advantages over other approaches (Goodman 1984). The present analysis is based on the "association model" (Goodman 1987, p. 576). This model predicts the cell counts in a cross-tabulation of class and party as:

$$\log(n_{ij}) = a + r_i + c_j + \sum_k \phi_k t_{ik} u_{jk},$$

where r_i and c_j are dummy variables for the i rows (classes) and j columns (parties). The association between the row and column variables is expressed in the last term, where k is the index of the dimension, t and u are standardized scores for the row and column categories along the dimension, and ϕ is a weight representing the strength of association. These scores are not imposed by the investigator but are estimated along with the other parameters. Most previous applications of the association model have employed only a single dimension, but the number of dimensions is limited only by the size of the table. Models with two dimensions are used in Gilula and Haberman (1986) and Smith and Garnier (1987).

The association model may be understood by comparison with factor analysis or canonical correlation analysis of a set of dummy variables representing class and party.⁴ Like these procedures, the association model produces sets of scores for classes and parties along a number of dimensions, but it has the added advantage of permitting tests of hypotheses about number of dimensions and differences among parameters. The log-linear association model may therefore be used for both exploratory and confirmatory analysis.

In the subsequent analysis, the primary interest is in comparing the strength of association over time or across cohorts. Since comparison is difficult if all the t and u scores are allowed to differ, most attention will be focused on the parameters ϕ . These parameters measure the "intrinsic association" along that dimension (Goodman 1987, p. 576): the larger the absolute value of ϕ , the stronger the relation between the variables. By analogy to ordinary regression, ϕ can be seen as the slope of the association across rows or columns.⁵ The predictions of the postmaterialist argument are that (1) two dimensions will be necessary to explain the association between class and party, (2) these dimensions can be interpreted as representing economic and postmaterialist value divisions, and (3) the ϕ corresponding to the value division should increase over time.

A few other points about these models should be noted. First, some normalizing restrictions are necessary to identify the parameter estimates. Here, we will follow Goodman's (1984, p. 127) practice of standardizing

⁴ Goodman (1987) gives an extensive discussion of the relations between the association model and approaches related to principal components analysis.

⁵ The strength of association can be measured by the odds ratios in the 2×2 subtables formed from adjacent rows and columns: $\pi_{ij}\pi_{i+1,j+1}/\pi_{i,j+1}\pi_{i+1,j}$. For a given set of row and column scores, an increase in ϕ implies an increase in the odds ratios (Goodman 1984, pp. 124–25). Another approach to measuring the strength of the relationship would be to consider the reduction in the chi-square from adding that dimension—i.e., testing the hypothesis that ϕ is zero. This procedure would give essentially the same results in the present analysis.

the scores by requiring that

$$p_i t_i = 0 \text{ and } p_i t_i^2 = 1,$$

where p_i is the proportion of cases in row i , with corresponding conditions for u . Second, as in unrestricted factor analysis, there is no unique way of distinguishing the dimensions. Since no equivalents to the rotations used in factor analysis have yet been developed, we will define the dimensions by requiring them to be orthogonal and maximizing the variance explained by each sequentially. The resulting dimensions will not necessarily correspond to the representation most meaningful in theoretical terms, but this indeterminacy fortunately affects only the ease of interpretation, not any of the statistical results.

The data are taken from the European Community Studies carried out initially in 1973 and twice a year from 1975 onward (Inglehart et al. 1985). These surveys are unique in containing comparable information on occupation and voting intentions over a reasonably long period of time. Each survey asks the respondent what party he or she would vote for "if an election were to be held today." (In Italy, the respondent is asked whether he or she "feels closer to one particular party.") The surveys also contain information on six categories of occupation and employment status: farmers and fishermen, self-employed professionals, self-employed business owners, manual workers, nonmanual workers, and "top management."⁶ This system of occupational classification is based more on common sense than on an explicit theory of class, but the surveys do not contain the more detailed information necessary to reproduce other class definitions. Yet despite the possible drawbacks of this occupational classification, the classifications do make distinctions between the self-employed and wage workers and between manual and nonmanual workers that are central to Weberian class schemas such as that of Giddens (1975). Hence, it represents an improvement on most previous studies of class voting, which generally use a simple manual/nonmanual dichotomy (e.g., Alford 1972). All people are classified by their own jobs, rather than by the job held by the "head of the household," while those who are not employed (students, the unemployed, retirees, and full-time homemakers) are excluded from the analysis. There has been a good deal of debate on both of these issues, particularly on whether married women should be classified by their own job, their husband's job, or some combination of the two. These issues cannot be

⁶ This final category is problematic because its size differs greatly among the countries, suggesting that coders employed more stringent definitions in some countries than in others. Nevertheless, the distinction still seemed worth preserving, since the main comparison is over time within countries rather than between countries.

adequately discussed here, but it happens that the choice does not make any important difference for this analysis; results of a separate analysis of men and women will be briefly discussed later in the paper.

THE POSTMATERIALIST HYPOTHESIS

The central assumption of most versions of the postmaterialist argument is that concern with economic issues declines as material well-being increases. People whose material needs are largely satisfied become more concerned with what Inglehart (1984, p. 33) calls "social and aesthetic quality of life," including issues such as self-expression, a sense of community, and protection of the environment. Education generally increases the importance people attach to values such as self-expression and individual autonomy. It is, consequently, the affluent and educated groups that are most likely to espouse postmaterialism.

The programs of leftist parties generally express the values favored by postmaterialists: think of the slogan "liberty, equality, fraternity." In contrast, the values emphasized by the right, such as preserving order and respect for authority, are irrelevant or antithetical for postmaterialists. Hence, postmaterialists tend to support the left. Yet the traditional supporters of left-wing parties, manual workers, generally are materialists. As postmaterialist issues become more prominent, "they have sometimes engendered a materialist reaction, . . . mobiliz[ing] segments of the working class, as well as the traditional middle class . . . in opposition to proposed social change" (Inglehart 1984, p. 33). Lipset (1981, p. 521) similarly argues that "reactive social conservatism has helped to recruit support for right-of-center parties from less privileged and less educated strata." These processes are expected to become more important in determining political alignments as postmaterialist themes become more central in political discourse.

Expected Class Positions

Which classes will have the highest prevalence of postmaterialist values? For the reasons mentioned above, one would expect the middle class to be more postmaterialist than the working class, and Inglehart (1989, p. 164) finds this to be the case. Further distinctions can also be made within the middle class. If economic security and education promote postmaterialism, the "new middle class" of salaried white-collar workers is likely to be more postmaterialist than the traditional petty bourgeoisie.⁷

⁷ It is possible that further divisions could be made within the new middle class (see the survey in Brint [1985]). Some accounts see the major base of leftism as the

Independent professionals are better educated than farmers or owners of small businesses and are often protected against economic competition through licensing and professional regulation, so they may also tend toward postmaterialism. The position of top managers is ambiguous, since people with postmaterialist values may be attracted to jobs offering a relatively low level of material rewards, such as teaching or social service (Inglehart 1989; Macy 1988). If this is the case, managers may be predominantly materialist by self-selection, despite their education and affluence. Nevertheless, according to Inglehart's index, younger managers and professionals are very strongly postmaterialist (Inglehart 1989, pp. 319–322). To summarize, a postmaterialism dimension should oppose salaried white-collar workers (and possibly managers and independent professionals) to manual workers and the petty bourgeoisie.

Expectations for the conventional left/right dimension are clear: manual workers at the left, white-collar employees in the middle, and executives and petty bourgeoisie on the right. This ordering is found, for example, in my (1989) analysis of British election data.

Expected Party Positions

Class voting depends not only on the values of people in different classes but also on whether parties appeal to those values. Testing the account of changing class alignments is possible only where parties offer voters a range of choice over both dimensions. The selection of France, Italy, and the Netherlands is dictated primarily by this consideration.⁸ To aid in following subsequent discussion, the parties in these nations are listed in table 1, ordered roughly by ideology with the left at the top.⁹ More details

"intelligentsia," which is only a fraction of the salaried middle class. Such accounts usually hold that material interests differ within the middle class or that self-selection leads certain segments to support the left. Others, like Inglehart (1977, 1984, 1987), stress the common factors of education and affluence and do not put much importance on this distinction. For the present purposes, the important point is that in either case the center of support for the new politics is contained within the middle class. Further investigation of divisions within the middle class would require data with more detailed occupational information.

⁸ Although a good deal of work on postmaterialism and related issues has focused on West Germany, that nation cannot be used for this analysis since it was dominated by two parties for most of the period. Until the rise of the Greens, there are too few parties to make dimensional analysis useful.

⁹ Certain small parties were combined with others that seemed similar ideologically and had indistinguishable class bases. For example, several small religious parties in the Netherlands were combined. In France and Italy, the class composition of those who favored "other" parties did not differ significantly from those who did not express a preference; in the Netherlands, however, it did differ, so "other parties" was kept as a distinct group. The complete list of parties is contained in the documentation for Inglehart et al. (1985).

TABLE 1
PARTY NAMES

France	Netherlands	Italy
PSU	Communist	Proletarian Democrats
Communist	Pacifist Socialist	Radical
Socialist	Radical	Communist
MRG	Labor	Socialist
CDP	Democrats '66	Social Democratic
Radical	Social Democrats	Republican
Ecologists	Centrum	Christian Democratic
Gaullists	Catholic	Liberal
Giscardian	Anti-Revolutionary	MSI
UDF	Christian Historical Union	Other
Other	Christian Democrats	DK/NA
DK/NA	Liberal	
	Miscellaneous religious	
	Other/DK/NA	

NOTE.—Parties (except Other and DK/NA) in each country are ordered roughly from most left (top of list) to most right, following Inglehart et al. (1985)

on the ideology and history of the parties are given in the Appendix below. Since the appearance of new parties is fairly frequent in all three nations, the party systems are likely to be responsive to the rise of new concerns. As early as the mid-1970s, Inglehart (1977, p. 250) found that "the conventional Left-Right dimension has been modified to accommodate the Materialist/Post-Materialist dimension in these countries." France is a possible exception, since it seems to have a lower prevalence of postmaterialism than would be expected from its economic development alone (Inglehart 1987, p. 1294) and most evidence (Inglehart 1987, p. 1297; but see also Abramson 1971) indicates that class voting in France has declined little, if at all, over the past few decades. These considerations would suggest that the postmaterialist dimension is likely to be the weakest in France. Inglehart (1977, p. 261), however, argues that because of the recent establishment of the current party system, France should be among the countries *least* resistant to realignment around new issues. Consequently, even if the new dimension in France is weaker than would be predicted by economic development alone, its emergence should still be discernible.

Inglehart's analysis of voters and party candidates (1984, pp. 48–51) supports the claim that parties offer a choice on both the materialist and the postmaterialist dimension. He finds that it is possible to distinguish between the traditional left of Communists and Socialists and a "new politics" left that includes parties such as the Ecologists, the Italian

Radicals, the Dutch Radicals, the Democrats '66, and the French Unified Socialists (PSU). This second group appeals strongly to postmaterialists and hence is expected to be at the left of a postmaterialist dimension. Communist and Socialist parties are expected to be less strongly on the left of this dimension, but we can anticipate some national differences in the location of the Communist parties. The French Communist party has been reluctant to abandon its traditional policies and structure and has taken "conservative" positions on issues such as nuclear power. The Italian Communists, on the other hand, have been more willing to adopt policies that would appeal to middle-class postmaterialists: Inglehart (1977, p. 242n) remarks that the party "seems to enjoy a relative preference in the Post-Materialist constituency . . . [but] support for the French Communist Party does not show a similar pattern." The Dutch Communists, like the Italians, seem to have oriented themselves to postmaterialist concerns. Liberal parties such as the Italian Republicans, because of their traditional emphasis on individual freedom, may also have some appeal to postmaterialists.

Expectations about parties of the right are less clear. While a distinctively postmaterialist right is possible in principle, observers disagree over whether one actually exists. Flanagan (1987) argues that there is a new right, which avoids questions of economic redistribution and focuses on moral concerns such as "law and order, restrictions on immigration, opposition to abortion and anticommunism" (Flanagan 1987, p. 1308). As a result, the new right obtains strong support from working-class voters, who are attracted by cultural traditionalism without being repelled by economic interests.¹⁰ Inglehart, however, generally implies that there is only one right and that the so-called new right may be more extreme but is on essentially the same dimension as the traditional right. Offe's (1985) "triangular" model of political division also clearly implies that there is no distinctively new right. In his analysis, the "conservative-liberal" right forms a single undifferentiated group. Hence, while it is agreed that traditional conservative parties should be on the right on both dimensions, the position of parties such as Italy's neofascists (MSI) is ambiguous. They should definitely be at the extreme right of any postmaterialist dimension, but there is disagreement over where they should fall on a materialist or economic dimension.

Most of the literature on political socialization suggests that predispositions are set in early adulthood and remain fairly constant thereafter. All available evidence suggests that younger cohorts are considerably less

¹⁰ Flanagan's argument is thus very similar to Lipset's (1981, pp. 87-179) hypothesis of separate dimensions of authoritarianism and economic leftism with its suggestion of the possibility of a distinctively working-class "fascism."

TABLE 2

FIT OF ORDERED CATEGORY MODELS, POOLED DATA, 1973-85

MODEL	FRANCE (<i>N</i> = 11,861)			NETHERLANDS (<i>N</i> = 7,056)			ITALY (<i>N</i> = 10,703)		
	<i>G</i> ²	<i>df</i>	BIC	<i>G</i> ²	<i>df</i>	BIC	<i>G</i> ²	<i>df</i>	BIC
Independence.	1,002.3	55	491.1	919.6	65	343.6	861.3	50	397.4
1 dimension.....	211.3	40	-160.5	219.6	48	-205.8	238.3	36	-95.7
2 dimensions.....	49.2	27	-201.8	43.4	33	-249.0	86.1	24	-136.6
3 dimensions.....	20.4	16	-128.3	18.6	20	-158.6	33.1	14	-96.8

materialist than older ones. Hence, the postmaterialist account predicts that the major cause of change in the class-party association should be the replacement of materialist cohorts by postmaterialist ones (Inglehart 1987, p. 1296). If this is the case, comparisons of cohorts may show patterns of change more clearly than comparisons of years. Yet comparisons among years will be informative if (as Inglehart suggests) parties respond relatively slowly to changes in the electorate. That is, in the early years of a cohort, there may be a demand for postmaterialist policies but no party that is committed to them. Only when parties begin to respond will this demand find an outlet. The span of years considered here is well suited to discovering such change: several parties expected to appeal to postmaterialists (such as the Ecologists and the Italian Radicals) were formed in the 1970s, and postmaterialist themes became more prominent within some of the established parties.

ANALYSIS

A natural first step is to ask how many dimensions are needed to account for the association between class and party and whether they can be interpreted in terms of theoretical expectations. Table 2 shows the results of fitting association models for the three nations when data are pooled across years. The fit of the models can be assessed by the fit statistic (G^2) in relation to the degrees of freedom. Because of the large samples (about 10,000 cases per nation) the standard chi-square test of fit might be regarded as too stringent, so the table also includes the BIC statistic suggested by Raftery (1986), which adjusts the fit statistic by sample size and degrees of freedom. A negative value for the BIC is desirable, and a smaller value represents a better fit. One-dimensional models clearly fail to completely account for the association between class and party in any of the nations. Adding a second dimension improves the fit substantially, although the models for Italy and France still do not fit at conventional levels of significance. According to the standard chi-square test, a

Occupation and Party Choice

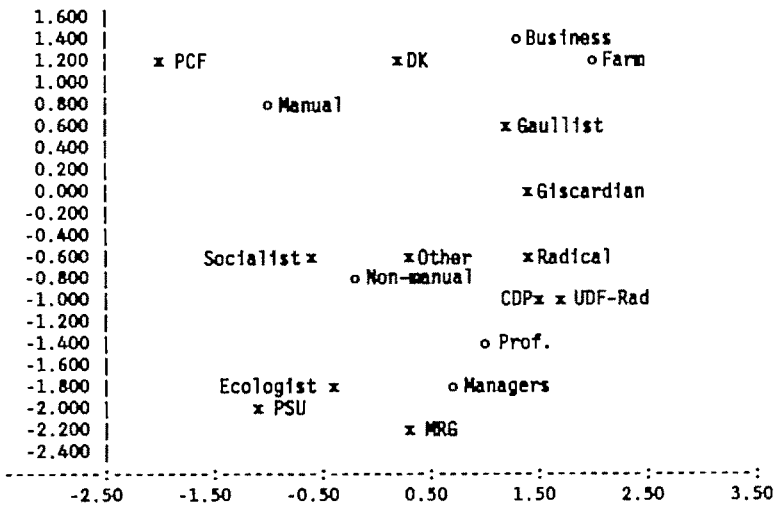


FIG. 1.—Class and party scores from the two-dimensional association model, France. Scores are standardized as described in the text. Parties are symbolized by X, classes by O.

third dimension produces statistically significant improvements of fit in all nations, but the gain is small relative to the first two dimensions, and the BIC suggests that two-dimensional model should be preferred. Since inspection of the individual scores for the third dimension did not suggest any interesting substantive interpretations, discussion will be confined to the two-dimensional models.¹¹

As the postmaterialist account predicts, a single dimension is not sufficient to explain the association between class and party. To evaluate the theory further, we must turn to individual scores for classes and parties, displayed in figures 1–3. Each point corresponds to the position of a party or class in the two-dimensional space, as in conventional multivariate techniques such as factor analysis. The figures are arranged so that the first dimension is on the horizontal axis and the second is on the vertical, with parties and classes represented by different symbols. From the figures, it is possible to make statements about the similarity of classes and parties on each dimension. For example, looking at the figure for France (fig. 1), we find that the Ecologists are close to the Socialists on the first

¹¹ Addition of a third dimension had the greatest effect in Italy, where it reduced the G^2 by 53.0 (10 df). The scores for the third dimension suggested a difference in the preferences of farmers and professionals among parties of the right, with farmers more disposed to support the Christian Democrats and professionals to support the Liberals or Republicans. The finding, while plausible, is not particularly relevant to the present investigation, so the third dimension is not considered further.

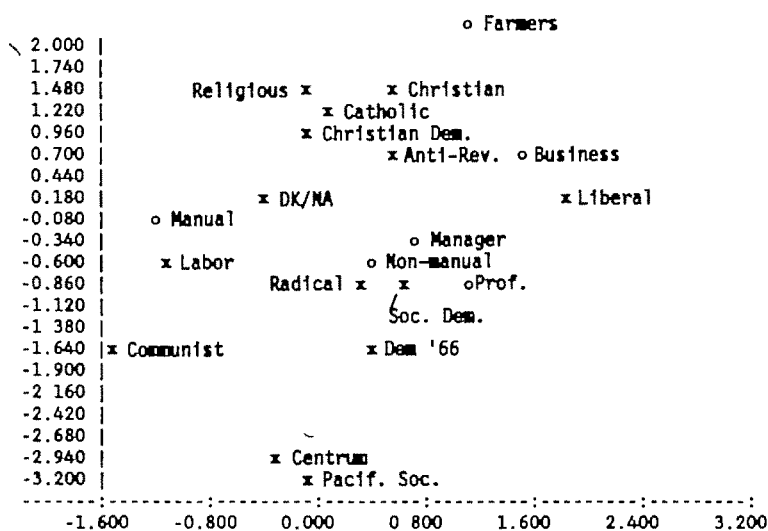


FIG. 2.—Class and party scores from the two-dimensional association model, the Netherlands. Scores are standardized as described in the text. Parties are symbolized by X, classes by O. Farmers are off the vertical scale (4.91).

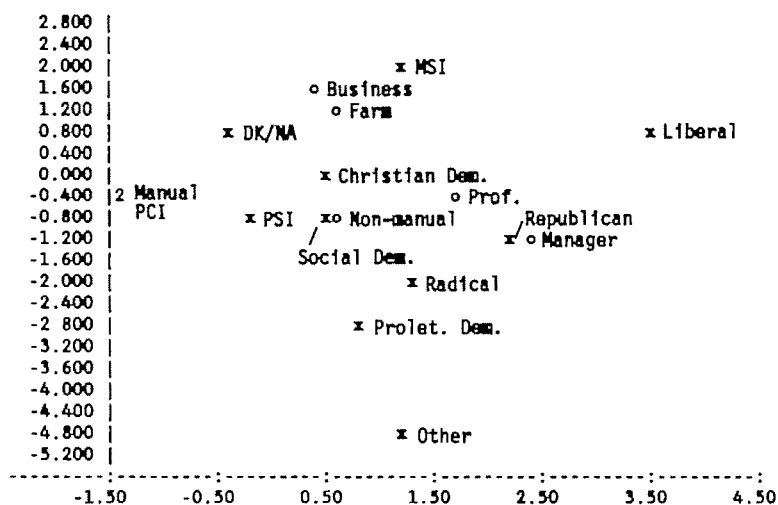


FIG. 3.—Class and party scores from the two-dimensional association model, Italy. Scores are standardized as described in the text. Parties are symbolized by X, classes by O.

dimension but are most similar to the MRG (a nonsocialist "radical" party) on the second. The Ecologists are fairly close to manual and nonmanual workers on the first dimension and to top managers and professionals on the second. They are distant from both business and farm owners on both dimensions, which suggests that they received little electoral support from these two groups (as was the case).

As mentioned above, the axes of the figures are defined to be uncorrelated and to maximize the variance accounted for by the first dimension. This is arbitrary in terms of the theory, which does not require that the dimensions be uncorrelated. Fortunately, it does appear that the dimensions as defined here can be reasonably interpreted in terms of theoretical expectations. The scales are ordered so that the "left" corresponds to a negative score on each dimension. The first appears to correspond to the traditional left/right division. In all three countries, we find an opposition between Communist and conservative parties that corresponds to an opposition between manual workers and the petty bourgeoisie. Socialist parties and nonmanual employees, as expected, occupy intermediate positions. The second dimension, however, opposes professionals, top management, and nonmanual employees to the petty bourgeoisie and farmers. The parties associated with professionals and nonmanual workers include the Unified Socialists and Ecologists in France, the Pacifist Socialists in the Netherlands, and the Radicals in Italy—all parties representing "new politics" in Inglehart's account. This is exactly the division predicted by the postmaterialist account.¹²

Given the strong relation between education and many social attitudes, it is worth asking whether the second dimension merely reflects educational differences among the classes. I found that adding years of education to the analysis has little effect on party preference along the first dimension but definitely shifts people toward the left of the second dimension, a result that supports the interpretation of this dimension in terms of postmaterialism.¹³ As would be expected, the class effects became

¹² It is worth noting, however, that in the Netherlands and Italy manual workers are very close to the white-collar groups on this dimension. This finding suggests that authors such as Lipset have exaggerated the extent to which the working class is opposed to the new middle class on the noneconomic dimension. Whether this result would hold under other class schemas is a point deserving further investigation.

¹³ The education variable was based on age at leaving school and grouped into six categories. Analysis showed that it could be treated as a continuous linear variable without significant loss of fit. The analysis treated the class and party scores from the previous stage as fixed and estimated the weights on interactions between class and party and class and education. A full maximum-likelihood analysis would use the table of class by party by education and estimate scores for each simultaneously. Because of the sparseness of the resulting table and the size limits of the programs used, this approach was not feasible.

weaker, but they remained significant in all three countries. Thus, it appears that education is indeed one of the factors underlying the second dimension, but that class also has a distinct effect of its own.

Although the preceding results are consistent with the postmaterialist account of political divisions, it would be desirable to establish that the positions are in fact related to political beliefs. In several of the European Community Surveys, respondents were asked to agree or disagree with statements on the desirability of reducing economic inequality, increasing public ownership, extending government management of the economy, strengthening military defense, protecting the environment, developing nuclear power, and severely punishing acts of terrorism. The party scores from the analysis reported in figures 1-3 can be compared to the average positions of party supporters on these issues. The first three statements are traditional issues of conflict between the left and right, appealing to the material interests of different classes, while the last three are more related to the concerns said to characterize postmaterialism. The traditional left is expected to favor the first three positions; the postmaterialist left, to favor protecting the environment, oppose nuclear power, and oppose severe punishment of terrorists. Defense is more ambiguous: while pacifism may be an important part of the ideology of new social movements, the Cold War has made opposition to a stronger military an important issue to Communist parties as well. Hence, both lefts are expected to oppose the military, but it is not clear which should do so more strongly. If my interpretation of the class-party association models is correct, scores on the first dimension should be strongly correlated with average positions on inequality, nationalization, and government management, and scores on the second dimension should align with positions on the environment, nuclear power, and terrorism. This is not to say that dimension scores should be uncorrelated with issues in the other group. Since "leftist" positions on both of these sets of issues tend to go together on an individual level, some correlation of both dimension scores is likely with all issues.¹⁴ The important comparison is the relative strength of association: scores on the second dimension should be *more* strongly correlated with leftist positions on the postmaterialist issues than with the materialist issues.

Correlations of the party scores and average issue positions are dis-

¹⁴ A confirmatory factor analysis of individual policy positions showed the expected division between the two sets of issues. If a first factor is allowed to load on inequality, government management, and nationalization, and another on defense, terrorism, nuclear power, and the environment, the interfactor correlations range from 0.4 to 0.6 in the three nations.

played in table 3.¹⁵ The study asked respondents to agree or disagree with statements about the desirability of pursuing the stated goals. A positive correlation indicates that support for the goal is greater among supporters of what I have interpreted as the left. We see, for example, that supporters of parties on the left of the first dimension tend to favor nationalization and oppose expansion of nuclear power. For the Netherlands and Italy, the expected pattern is evident: the first dimension has stronger correlations than the second with inequality, nationalization, and government management, while the second has stronger correlations with defense, environment, nuclear power, and terrorism. In France, the pattern is less obvious, since the first dimension is more strongly correlated with positions on all issues. Closer examination, however, shows that the results are consistent with expectations: "leftism" on the second dimension has the expected associations with defense, nuclear power, environmental protection, and punishing terrorism. On the economic issues, "leftism" on the second dimension actually has a slight negative correlation with traditionally leftist positions. Hence, the *difference* between the two sets of issues is quite substantial. This result is underlined when one looks at the complete ordering of parties on different issues: for example, supporters of the Communist and Socialist parties are most favorable to government efforts to reduce inequality, while supporters of the Ecologists and PSU are most strongly opposed to the extension of nuclear power.

Because of the indeterminacy in defining the dimensions, it would be unwise to make too much of the negative correlation of the second dimension and traditional economic issues in France. Somewhat different results could be obtained by rotating the axes or allowing the dimensions to be correlated. Nevertheless, it does seem that in France the second dimension has not emerged as clearly in terms of party ideology, although it is evident in the association of class and party. This may indicate that the interpretation of politics in traditional left-right terms is stronger in France than elsewhere, supporting Inglehart's (1987) claims on the slower development of a postmaterialist ideology there. Even for France, however, the most important result of this analysis is to show that the two dimensions derived from the class-party association have different patterns of correlation with economic and noneconomic issues. Conse-

¹⁵ These are aggregate-level correlations, based on the average scores of party supporters. Analysis of individual-level correlations leads to essentially identical conclusions on the interpretation of the dimensions, although all of the individual correlations are naturally smaller than in the aggregate analysis.

TABLE 3
CORRELATIONS OF PARTY SCORES FROM TWO-DIMENSIONAL ASSOCIATION MODEL AND POLICY VIEWS OF PARTY SUPPORTERS, BY NATION

Issue	Dimension 1			Dimension 2		
	France	Italy	Netherlands	France	Italy	Netherlands
Reduce inequality .. . . .	.676	.841	.754	-.155	.327	.662
Nationalize industry .. . . .	.895	.614	.780	-.182	.360	.361
Government management						
of economy .. . . .	.590	.349	.886	-.117	.072	.480
Strong defense	-.710	-.237	-.179	-.105	-.508	-.858
Protect environment .. . . .	.498	.366	.100	.266	.774	.971
Expand nuclear power	-.835	-.471	-.232	-.225	-.636	-.783
Punish terrorists	-.791	-.257	-.022	-.411	-.752	-.771

TABLE 4

FIT OF TWO-DIMENSIONAL ASSOCIATION MODELS FOR OCCUPATION AND VOTE

Model	France	Netherlands	Italy
Constant.	710.5 (534)	580.7 (488)	623.2 (500)
Variable	664.8 (514)	553.2 (470)	589.4 (480)
Variable			
party scores.....	397.6 (336)	310.9 (348)	395.9 (312)
Variable			
class scores.....	537.6 (440)	435.2 (410)	502.0 (400)

NOTE.—Figures are maximum-likelihood chi-squares. Degrees of freedom are in parentheses.

quently, the interpretation of the scores in terms of materialist and post-materialist dimensions is justified.

Changes over Time

In the association models, change can be modeled by making the row and column scores in table 3 identical across years while permitting the weights for the two dimensions to vary. This representation is consistent with the postmaterialist account, which sees the change in terms of the changing relative importance of two constant political divisions. Inglehart's (1989) and Lipset's (1981) accounts suggest that the coefficient for the first dimension should decrease and the second should increase over time, as postmaterialist concerns replace materialist ones in determining voters' choices. Two less restrictive models are also estimated for purposes of comparison. The first holds the class (column) scores constant and allows the party (row) scores to vary by year, which may be interpreted as supposing that the basic dimensions of ideology remain the same but that parties can change their response to them over time. The second model lets class scores vary by year, while the party scores stay fixed. By examining the estimates from these less restrictive models, it is possible to see whether any general trends are obscured or distorted by the unusual behavior of particular parties or classes.

The fit statistics of association models allowing change in parameters are displayed in table 4. The improvement can be assessed by the differences in models in fit and degrees of freedom: for example, allowing weights to differ in France reduces the fit statistic by 45.7 (710.5 - 664.8) at the cost of 22 (534 - 512) degrees of freedom, which is significantly better than one would expect under the null hypothesis of a chi-square distribution. Allowing the weights to vary produces significant improve-

ment in France and Italy and a marginally significant improvement in the Netherlands.

The precise nature of the changes in weights can be seen in table 5, which shows differences from the mean value of ϕ by year for the three nations. The means are simply the averages of the weights for all 12 years in the given country. A negative sign indicates that the effect of the dimension was weaker than the average for the period as a whole, and a positive sign indicates that it was stronger than average. The postmaterialist account predicts that the differences for the second dimension will tend to shift from negative to positive over the years. In fact, for France and Italy there is no evidence of any trend: the weights change from one election to the next, but there is no general tendency to increase or decrease. If any trend exists, it is dwarfed by short-term fluctuations. For the Netherlands, there seems to be a tendency for the weight of the first dimension to decline. It is not clear, however, that the second dimension is becoming more important: the estimates for the later years tend to be greater than average, but the maximum occurs in 1981, and later years are not significantly different from the mean.

Turning to the less restrictive models, we find that allowing class or party scores to vary improves the fit in France and the Netherlands, although not in Italy. From inspection of the estimates, it appears that certain parties or classes did shift on one or the other of the dimensions, but there were no clear regularities across nations. In short, the more complicated models add further detail but do not significantly change the overall picture. Regardless of which model is used, the analysis by years does not bear out the prediction of a general shift in the weights of the dimensions.

Changes across Cohorts

Since the comparison of years does not show clear differences, I turn to a comparison of cohorts, which might reveal long-term trends more clearly. Respondents are divided into eight birth cohorts for the analysis: before 1920, 1920–29, 1930–39, 1940–44, 1945–49, 1950–54, 1955–59, and after 1960. Five-year intervals were used after 1940 because economic growth, which is held to be a major source of value change, was more rapid in the postwar period. The prediction is that the second dimension (postmaterialism) should have relatively greater weight in the younger cohorts, which are composed of people who grew up in circumstances where material needs were less pressing.

Table 6, which shows the deviations from the mean values of ϕ for cohorts, indicates that the dimension weights do differ significantly among cohorts in France and the Netherlands, but not in Italy. Examin-

TABLE 5
COMPARISON OF DIMENSION WEIGHTS BY YEAR

	FRANCE		NETHERLANDS		ITALY	
	Dimension 1	Dimension 2	Dimension 1	Dimension 2	Dimension 1	Dimension 2
Deviation from mean:						
1973	-.096*	.032	...	...	-.003	-.068*
1975 .....	.035*	-.003	.066	-.062	-.020	.000
1976	-.037	.017	.038	-.030	-.012	.020
1977 .....	.014	.069	.000	.046	-.055	-.004
1978 .....	.011	.006	.000	-.064	.057	.029
1979	-.098*	.031	-.012	-.026	.009	-.050
1980	-.002	.068*	.097*	-.084*	-.002	-.055*
1981 .....	.084*	-.082	.037	.087*	-.003	.066*
1982 ....	.003	.023	-.038	.019	-.014	.057*
1983	-.006	-.014	-.052	.081	.029	-.020
1984 . ....	.062	-.026	-.004	.011	.062	-.074*
1985	-.002	-.121*	-.137*	.025	-.043	.100*
Means .....	.286	.114	.331	.208	.255	.120

* The parameter estimate for the year differs from the mean at the 10% significance level.

TABLE 6
COMPARISON OF DIMENSION WEIGHTS BY COHORT

	FRANCE		NETHERLANDS		ITALY	
	Dimension 1	Dimension 2	Dimension 1	Dimension 2	Dimension 1	Dimension 2
Deviation from mean:						
Pre-1920	- .139*	.004	.080	.004	.114*	.003
1920-29 .....	.014	.009	.083*	-.029	.014	-.015
1930-39 .....	.043	.002	.084*	.041	-.006	-.009
1940-44	-.007	.053	.005	-.006	.007	.054*
1945-49 .....	.003	.004	-.058*	.029	-.023	-.014
1950-54 .....	.064	.055	-.044	.129*	.021	.008
1955-59 .....	.078	-.002	-.034	-.037	-.024	-.010
1960-67	-.060	-.115*	-.116*	-.131*	-.103*	-.011
Means .....	.243	.150	.321	.164	.254	.113
Equality of weights (P value)†	40.9 (.0002)		33.4 (.0025)		17.8 (.216)	

* The parameter estimate differs from the mean at the 10% significance level

† The test for equality of weights is the difference in chi-square between constant- and variable-weights models (14 df)

ing the individual weights, however, we do not find the trend predicted by Inglehart's account. For France, all cohorts except the oldest and youngest are similar. The oldest cohort differs in having low weights on the first dimension—that is, the conventional left-right division is unusually weak, although the postmaterialist dimension is not especially strong. For the youngest cohort, both dimensions have low weights, but the second is especially weak. In this cohort, the class cleavage associated with postmaterialism is completely absent, which is exactly opposite to what is expected. For the Netherlands, there appears to be a general decline in the effect of the first (materialist) dimension: it is strongest in the three oldest cohorts, somewhat weaker in the fourth, and weaker still in the last four. There is, however, no clear pattern for the second dimension: it is strongest in the 1950–54 cohort but quite weak in the 1955–59 cohort. As in France, the youngest cohort stands out by having low weights on both dimensions. For Italy, the overall differences among cohorts is not significant, although once again the youngest cohort has low weights for both dimensions.¹⁶

In general, there are no signs of a trend toward replacement of conventional class divisions by postmaterialist divisions. If the youngest group is the harbinger of a trend, it is the decline of both sorts of class divisions. Even this, however, would probably be an unjustified conclusion. Divisions of all kinds tend to be weakest among younger voters, simply because they have not been fully incorporated into conventional party politics. If this is accepted as an explanation of the youngest cohort's distinctiveness, the picture is clearly one of stability in class cleavages. While some cohorts appear to differ from the norm, their behavior is probably related to the political situation in their formative years rather than to any general social changes. Otherwise, it would be difficult to explain why, for example, conventional class divisions have an unusually weak effect among the pre-1920 cohort in France, but an unusually strong effect among the same cohort in Italy. As with the comparison

¹⁶ Separate analysis of men and women by cohort indicated some differences, but no general trends. The weight of each dimension was approximately the same for women and men, and differences among cohorts did not follow any obvious pattern. The most striking individual differences were in the oldest cohorts of French and Dutch women, where the association along the first dimension was unusually weak in both and association along the second was also weak for the Dutch. For Italy, on the other hand, the oldest cohort of women showed no significant difference from the average. One possibility is that women in this cohort are more significantly influenced by husbands' voting choices than are younger women, an effect which could be weaker in Italy because of the absence of political competition during that cohort's early adulthood.

among years, the best way to summarize the results is to note the absence of any clear trend.¹⁷

DISCUSSION

I demonstrate that class divisions, whether analyzed by year or by cohort, are largely constant in the three nations analyzed here. The one fairly clear change is an absolute decline of the materialist dimension in the Netherlands, which, while consistent with the postmaterialist account, is not a central proposition. Contrary to expectations, the second dimension is nowhere becoming more important in absolute terms. While the postmaterialist theory is correct in maintaining that class divisions cannot be reduced to a single dimension, it is apparently mistaken in claiming that the second dimension is becoming steadily more powerful.

One might object that the time period being considered is simply too short or that the relatively troubled economic situation prevailing in the 1970s and 1980s inhibited the growth of postmaterialism. Yet these objections would not account for the stability across cohorts. Unless people can switch rather quickly between orientations, which is inconsistent with understanding orientations as basic values, short-term political and economic conditions should not obscure the growth of postmaterialist cleavages across cohorts.

If the results are accepted, however, another question arises. How can they be reconciled with the apparently powerful evidence that Inglehart and others have assembled for the postmaterialist thesis—the apparent decline of class voting, the disproportionate participation of some middle-class groups in new social movements, and the appearance of nontraditional leftist parties? To insist on the stability of political divisions would seem to overlook these important aspects of contemporary politics. Nevertheless, I believe that the apparently disparate evidence can be reconciled by supposing that there are trends in average position along the dimensions. In particular, it is possible that *all* classes have been moving toward the postmaterialist left.¹⁸ Such a shift, I will argue,

¹⁷ A similar analysis was carried out comparing the dimension weights across educational categories. As with the analysis by year and cohort, there was no discernible trend across categories, although there are a few significant individual differences. Once again, there is no evidence that the strength of "materialist" or "postmaterialist" dimensions varies systematically.

¹⁸ A suggestive piece of information on this point can be found in Brint's (1984, p. 65) analysis of data from the United States, where he classifies ideologies into six types developed from answers to survey questions. He finds that respondents under 35 years of age are overrepresented among "New Politics Liberals." If a dimension of cleavage similar to postmaterialism is growing in importance, they should be correspondingly

could account for all of the recent developments offered as support for the postmaterialist account.

The possibility of a general shift can be evaluated by fitting models for the association of cohort and party. If we take the party scores from the analysis reported in figures 1–3 as fixed and estimate cohort scores for the association, the cohort estimates can be understood as affinity for the left or right of each position.¹⁹ The results, displayed in table 7, show a clear tendency for the later cohorts to be on the left on the postmaterialist dimension in all three nations. This movement, rather than being steady, seems to involve a large shift between the cohorts born before and after World War II, with smaller differences among the younger cohorts. A good deal of anecdotal evidence suggests that the cohorts that came to political consciousness during the late 1960s and early 1970s would be farthest to the left, with the most recent cohorts (those born after 1955) nearer the center. There is some evidence of such a tendency, especially in Italy, but any conservative trend among the youngest cohorts is small compared to their shared differences from the older cohorts. In France and Italy, although not the Netherlands, we also see a general movement to the left on the first dimension.

Such movements along either dimension could produce changes in class voting as conventionally measured even without a change in the importance of the dimensions (Heath, Jowell, and Curtice 1985, pp. 40–41). The most commonly used measure, the Alford index (Alford 1972), is defined as the proportion of manual workers voting left minus the proportion of nonmanual workers voting left. When the average support for the left is very low (or very high), the difference between classes as measured by this index will also be low, even if the relative difference is large. Hence, assuming the middle class is to the left of the working class on the nonmaterial dimension, if the population as a whole is initially on the right and moves toward the center, then the absolute increase in middle-class support for the left will be greater than the increase in

overrepresented among "New Right Conservatives," but this is not the case: it is respondents over 55 who are most likely to fall into the "New Right" group. Since it is not clear that Brint is measuring materialism and postmaterialism in the sense considered here, the evidence is not definitive, but it gives some support to the claim that there has been a general movement toward the postmaterialist left.

¹⁹ More precisely, the model is:

$$\log(\pi_{ij}) = a + r_i + c_j + u_i s_1 + v_j s_2,$$

for the i by j table of party by cohort, where s_1 and s_2 are the estimated party scores from the analysis of the table of class by party. Then u and v are sets of dummy variables representing the position of the classes along the dimensions defined by the party scores.

TABLE 7
COHORT POSITIONS ON DIMENSIONS

	FRANCE		NETHERLANDS		ITALY	
	Dimension 1	Dimension 2	Dimension 1	Dimension 2	Dimension 1	Dimension 2
Deviation from oldest cohort (pre-1920).						
Pre-1920. . .	.000	.000	.000	.000	.000	.000
1920-29 . . .	-.111	-.037	-.135	-.291	-.097	-.108
1930-39 . . .	-.264	-.122	-.135	-.309	-.197	-.093
1940-44 . . .	-.273	-.166	-.156	-.456	-.171	-.222
1945-49 . . .	-.409	-.220	-.038	-.602	-.216	-.252
1950-54 . . .	-.443	-.216	-.059	-.627	-.305	-.294
1955-59 . . .	-.499	-.198	-.092	-.656	-.316	-.198
1960-67 . . .	-.508	-.261	.078	-.546	-.179	-.131
Equality of scores (P value) ..	299.2 (.000)		258.7 (.000)		150.8 (.000)	

NOTE.—A negative score indicates an affinity for parties on the "left" of the dimension, with party scores as in figs. 1-3. The score for the oldest cohort is defined as zero to fix the scale. The test for equality of scores is the difference in chi-square from a model of independence of party and cohort (14 df).

working-class support, and overall class voting as measured by the Alford index will decline. In fact, if an Alford index is computed for each French and Italian cohort using the present data, it is found to be considerably smaller in the younger cohorts. As discussed above, there is no general change in the relative importance of the dimensions to change in these nations, but there is a leftward shift among younger cohorts on the post-materialistic dimension. This, apparently, is what the index is detecting. With this result in mind, the decline in class voting that Lipset and others have found for several nations is not clear evidence for a change in class alignments, and does not necessarily contradict the present findings.

A general leftward shift along the postmaterialist dimension would also account for the appearance of new parties and social movements. The leftward shift would mean that the potential constituency of movements for various social reforms is expanding. Most analysis, including this one, suggests that certain parts of the middle class will be in the forefront of support for such movements. At the same time, our interpretation implies that the working class, rather than reacting against these movements, is also becoming more favorably disposed toward them. This claim is supported by Kriesi's (1989, p. 1096) finding of broad support across classes for the Dutch peace movement. While the new middle class is the one most prepared to take action in support of the peace movement, substantial proportions of all classes profess some sympathy.²⁰

It is not possible to undertake a full explanation of the cohort shift here, but some preliminary investigation is possible. In particular, since education and affluence have often been seen as major causes of postmaterialist leftism, it is worth seeing whether the cohort and class effects remain when education and family income are taken into account.²¹ Family income (measured by quartile in the current income distribution) is found to produce a strong rightward shift on the first dimension, but to have no effect on the second. Thus, the claim that affluence shifts people toward the postmaterialist left appears to be false if affluence is understood as relative position in the national income distribution. Whether

²⁰ In some nations, recent years have also seen the rise of right-wing social movements focusing on values. The support for these movements may be largely from the working class or petty bourgeoisie, as Luker (1984) finds for antiabortion activists. Yet these movements are to a larger extent reactions against the success of new social movements of the left. That is, those who are opposed to the values of postmaterialism may be driven to become more active even while their numbers are shrinking.

²¹ Since the analysis of a complete four-way table would involve an unmanageably large number of distinct cells, I took the party scores reported in figs. 1-3 as fixed. That is, each person's party choice was assigned the score corresponding to that party, which made it into a continuous variable. This makes it possible to perform an ordinary regression analysis on the individual cases and to test for main and interaction effects of the independent variables.

affluence on the societal level has an effect is a separate question and cannot be addressed with the data used here. Education is strongly associated with cohort, so taking it into account might be expected to change the estimated cohort effects more substantially. Controlling for education does weaken class and cohort effects, but both nevertheless remain strongly significant. Rising average levels of education thus account for some, but not all, of the cohort differences found in this study.

Testing for interactions of class, education, and cohort revealed only one effect on theoretical interest: the interaction between education and cohort. The effect of education on the second dimension appears to increase among younger cohorts; that is, the tendency for more educated people to be on the left of this dimension is stronger among the young. Given the correlation between education and occupation, a continuation of this trend could result in increased importance for the second dimension of class-party association. Yet since the previous analyses showed that the relative weight of the dimensions has been essentially constant, it appears that some other factors have worked to offset this effect. While we cannot rule out the *possibility* that the second dimension will eventually grow relative to the first, it has evidently not yet been realized.

To summarize, observers such as Inglehart and Lipset hold that education and cohort change the relative weight of materialist and postmaterialist concerns. The present analysis does not support this part of their argument: education and cohort affect the position of people along the dimensions but do not affect the relative importance of the dimensions. The two dimensions exist alongside each other among all cohorts and at all levels of education.

SUMMARY AND CONCLUSIONS

Despite some secondary qualifications, the basic results of this analysis are clear: the association between class and party has been essentially constant in France and Italy; in the Netherlands, there is some evidence that the traditional class division is becoming *less* important, but no sign that the postmaterialist dimension is becoming *more* important. Thus, the postmaterialist argument on the changing importance of different class divisions is not supported. Even if investigations of other nations support the postmaterialist analysis, the present work has shown that it is not true for all advanced capitalist democracies. Hence, one can conclude that changes in class voting, when they occur, are not the direct consequence of general social trends common to industrial societies. While this investigation has not focused on explaining the differences among countries, one possibility is that they result from party strategies

and government policies. Esping-Anderson (1985), for example, finds differences in the extent of Social Democratic "decomposition" in Denmark, Norway, and Sweden, which he explains by differences in the social policies implemented by the parties. To discover whether a similar explanation could account for the differences among the countries considered here would require a separate project, but the general approach seems promising.

Finally, it should be emphasized that the postmaterialist account is correct on one important point: the relation between class and vote cannot be described adequately by a single dimension. That this is true even for the oldest cohorts suggests that the conventional model of class politics may have been inaccurate even before it attracted widespread challenge. It is easy to see the present as more difficult and uncertain than the past, not because it actually is so, but simply because we are more removed from the complexities of the past. The results of this analysis, while not definitive, suggest that even the past relations between class and party choice may have been more complex than allowed for in sociological theory. Rather than oppose a simple class alignment of the past to the allegedly more complex divisions of the present, we should extend class analysis to account for the real complexity of both periods.

APPENDIX

Descriptions of Parties

This Appendix briefly describes the ideology and history of the parties in France, Italy, and the Netherlands, using Day and Degenhardt (1980) as the major source. Figures in brackets at the end of each entry are the percentage of respondents supporting the party for the combined years 1973–85. Acronyms or abbreviations in parentheses link party names with variables used in the Appendix tables.

France (see table A1 below):

PSU (Unified Socialist Party): leftist party, supported student and workers' movement in 1968; led an electoral alliance of "ecological, feminist, and regional groups" (Day and Degenhardt 1980, p. 107) in 1978 parliamentary elections; supporters of other far-left groups are also included here [3.1]

Communist party (PCF): dominant party on the left until the 1970s; moderated Leninist principles during the 1970s but remained relatively orthodox; supported the Socialist candidate (Mitterand) in 1974 and 1981 [9.0]

Socialist party (SOC): has eclipsed the Communists as the major party

TABLE A1
PARTY VOTE BY CLASS, FRANCE

	PSU	PCF	SOC	MRG	CDP	RAD	ECO	GAU	GIS	UDF	OTH	DE/NA	N
Farm ..	.011	027	.189	015	040	045	014	229	149	023	035	.224	1,204
Business..	.010	046	.182	.014	030	033	.045	181	.118	017	053	.271	804
Professional .....	.049	036	.244	033	.042	051	044	.129	089	040	065	.179	260
Manager .....	.039	.038	281	.040	031	.027	.055	129	123	024	.055	.158	792
Nonmanual .....	.036	076	.332	.023	023	027	060	115	.072	013	048	.176	4,192
Manual ...	.035	.155	331	.014	011	.015	.037	089	.056	008	.036	.212	3,627
N	341	989	3,256	218	243	283	493	1,360	898	156	476	2,166	10,879

- of the left; principal governing party since 1981; has followed relatively moderate policies in power [29.8]
- MRG (Left Radical Movement): leftist splinter of Radical party; has generally supported the electoral alliance of the left [2.0]
- CDP (Center for Democracy and Progress): alliance of centrist groups; supported Giscard in 1974; merged into UDF in 1978 [2.1]
- Radical party (RAD): centrist party; dominant in Third and Fourth Republics; supported Giscard in 1974; merged into UDF in 1978 [2.5]
- Ecologists (ECO): formed in 1980 from an alliance of several environmentalist groups [4.6]
- Gaullists (GAU): groups descended from the Gaullist movement; challenged by Giscardians in the 1970s for dominance on the right but has since reemerged as the major force [12.7]
- Giscardian (GIS): groups supporting Giscard d'Estaing (president 1974–81), including Republicans; generally center-right [8.3]
- UDF (Union for French Democracy): formed in 1978 by an alliance of non-Gaullist groups on the center and center-right; supported Giscard [1.6]
- Other (OTH): includes regional parties [4.4]
- Don't know/no answer (DK/NA): [19.7]

Netherlands (see table A2 below):

- Communist (COM): relations with the Soviet Communist party have been distant; has sought to cooperate with other socialist parties [1.2]
- Pacifist Socialist (PAC): leftist party oriented toward pacifism [2.4]
- Radical (RAD): left-wing splinter from Catholic party; has favored socialist and environmentalist policies [2.3]
- Labor (LAB): leading party of the left; social democratic policies [26.7]
- Democrats '66 (D66): program emphasizes environmentalism, "responsibilities for the oppressed and the underdeveloped countries" (Day and Degenhardt 1980, p. 243); has participated in coalition governments with Labor party [7.7]
- Social Democrats (SDP): right-wing splinter from Labor party [0.7]
- Centrum (CEN): moderate party [0.3]
- Catholic (CAT): Christian Democratic party; traditionally one of the major conservative groups [2.7]
- Anti-Revolutionary (ARP): conservative, Protestant-based party [1.1]
- Christian Historical Union (CHU): conservative, Protestant-based party [1.0]
- Christian Democrats (CDP): union of the three preceding parties, formed in 1978 [18.4]
- Liberal (People's Party for Freedom and Democracy) (LIB): "liberal con-

TABLE A2

PARTY VOTE BY CLASS, NETHERLANDS

	COM	PAC	RAD	LAB	D66	SDP	CEN	CAT	ARP	CHU	CDP	LIB	REL	OTH/DK/NA	N
Farm ....	.000	.003	.013	.059	.013	.004	.000	.054	.016	.032	.416	.236	.052	.101	242
Business....	.005	.009	.016	.119	.057	.003	.002	.019	.017	.011	.191	.375	.029	.146	592
Professional ..	.017	.040	.035	.154	.098	.003	.003	.027	.010	.010	.152	.296	.003	.152	284
Manager ..	.008	.022	.024	.204	.105	.012	.002	.030	.011	.011	.188	.239	.016	.129	1,382
Nonmanual....	.008	.036	.031	.236	.097	.008	.005	.028	.012	.010	.174	.184	.020	.152	1,914
Manual ....	.020	.021	.019	.380	.060	.004	.002	.039	.009	.007	.175	.069	.022	.184	2,642
N.. ..	88	171	164	1,865	554	46	19	202	79	70	1,312	1,228	149	1,109	7,056

TABLE A3

PARTY VOTE BY CLASS, ITALY

	PRO	RAD	PCI	PSI	SDP	REP	CDP	LIB	MSI	OTH	DK/NA	N
Farm .....	.008	.002	.125	.093	.034	.021	.336	.028	.054	.010	.288	523
Business .....	.009	.011	.136	.125	.032	.030	.226	.032	.063	.002	.334	2,525
Professional ..	.027	.021	.127	.116	.036	.096	.181	.083	.070	.021	.224	390
Manager .....	.022	.010	.061	.172	.037	.124	.245	.126	.028	.014	.160	213
Nonmanual .....	.020	.020	.135	.150	.042	.043	.257	.026	.039	.013	.255	3,830
Manual .....	.011	.007	.266	.155	.028	.014	.182	.006	.022	.005	.302	3,222
N.	155	137	1,845	1,523	373	36	2,441	274	442	88	3,064	10,703

servative, supporting free enterprise and the separation of Church and State" (Day and Degenhardt 1980, p. 244) [17.4]

Miscellaneous religious parties (REL): includes several small conservative Catholic and Protestant parties [2.1]

Other (OTH)/Don't know/no answer (DK/NA): [16.0]

Italy (see table A3):

Proletarian Democrats (PRO): split from Communist party in opposition to its "historic compromise" with the Christian Democrats [1.4]

Radical (RAD): left-wing splinter from liberal party; has emphasized socialism, feminism, individual rights, and antimilitarism [1.3]

Communist (PCI): major party on the left, although it has been challenged by the Socialists recently; has been less orthodox than French Communists, abandoning much of Leninist ideology [17.2]

Socialist (PSI): social democratic party; has grown in size since the 1960s; led government after 1983 [14.0]

Social Democratic (SDP): split from Socialists in 1947 in protest of cooperation with the Communist party; has moved somewhat to the right, joining in coalitions with the Christian Democrats [3.4]

Republican (REP): liberal party, emphasizing individual rights; traditionally popular among non-Communist intellectuals; has participated in coalitions with the Christian Democrats [3.4]

Christian Democratic (CDP): largest Italian party, although it has lost ground in the 1970s and 1980s; led government until 1983; center-right policy [22.8]

Liberal (LIB): conservative party, emphasizing support for free enterprise [2.5]

Italian Social Movement (MSI): extreme right party, sometimes seen as descended from Mussolini's fascist movement; also includes supporters of Monarchist party [4.2]

Other (OTH): includes regional parties [0.8]

Don't know/no answer (DK/NA): [28.9]

REFERENCES

- Abramson, Paul R. 1971. "Social Class and Political Change in Western Europe." *Comparative Political Studies* 4:131-56.
- Alford, Robert R. 1972. "Class Voting in the Anglo-American Political Systems." Pp. 166-99 in *Mass Politics in Industrial Societies*, edited by Giuseppe Di Palma. Chicago: Markham.
- Anderson, Dewey, and Percy Davidson. 1943. *Ballots and the Democratic Class Struggle*. Stanford, Calif.: Stanford University Press
- Bauman, Zygmunt. 1982. *Memories of Class*. London: Routledge & Kegan Paul.
- Bell, Daniel. 1976. *The Coming of Post-industrial Society*. New York: Basic.

- Berelson, Bernard, Paul F. Lazarsfeld, and William N. McPhee. 1954. *Voting*. Chicago: University of Chicago Press.
- Brint, Steven. 1984. " 'New-Class' and Cumulative Trend Explanations of the Liberal Political Attitudes of Professionals." *American Journal of Sociology* 90:30-71.
- . 1985. "The Political Attitudes of Professionals." *Annual Review of Sociology* 11:389-414.
- Cohen, Jean. 1983. "Rethinking Social Movements." *Berkeley Journal of Sociology* 28:97-113.
- Day, Alan J., and Henry W. Degenhardt. 1980. *Political Parties of the World*. Detroit: Gale Research.
- Dunleavy, Patrick. 1980. "The Political Implications of Sectoral Cleavages and the Growth of State Employment." *Political Studies* 28:364-383, 527-549.
- Esping-Andersen, Gosta. 1985. *Politics against Markets*. Princeton, N.J.: Princeton University Press.
- Flanagan, Scott. 1987. "Value Change in Industrial Societies." *American Political Science Review* 81:1303-19.
- Giddens, Anthony. 1975. *The Class Structure of the Advanced Societies*. New York: Harper & Row.
- Gillula, Zvi, and Shelby J. Haberman. 1986. "Canonical Analysis of Contingency Tables by Maximum Likelihood." *Journal of the American Statistical Association* 81:780-88.
- Goodman, Leo. 1984. *The Analysis of Cross-classified Data Having Ordered Categories*. Cambridge, Mass.: Harvard University Press.
- . 1987. "New Methods for Analyzing the Intrinsic Character of Qualitative Variables Using Cross-classified Data." *American Journal of Sociology* 93:529-83.
- Hall, John A. 1987. *Liberalism*. Chapel Hill: University of North Carolina Press.
- Heath, Anthony, Roger Jowell, and John Curtice. 1985. *How Britain Votes*. Oxford: Pergamon.
- Inglehart, Ronald. 1977. *The Silent Revolution*. Princeton, N.J.: Princeton University Press.
- . 1984. "The Changing Structure of Political Cleavages in Western Society." Pp. 25-69 in *Electoral Change in Advanced Industrial Democracies*, edited by Russell J. Dalton, Scott C. Flanagan, and Paul Allen Beck. Princeton, N.J.: Princeton University Press.
- . 1987. "Value Change in Industrial Societies." *American Political Science Review* 81:1289-1303.
- . 1989. *Culture Shift in Advanced Industrial Society*. Princeton, N.J.: Princeton University Press.
- Inglehart, Ronald, and Jacques-René Rabier. 1986. "Political Realignment in Advanced Industrial Society: From Class-based Politics to Quality-of-Life Politics." *Government and Opposition* 21:456-79.
- Inglehart, Ronald, Jacques-René Rabier, and Hélène Riffault. 1985. *European Communities Studies, 1973-84: Cumulative File*. (MRDF). Ann Arbor, Mich.: ICPSR.
- Kriesi, Hanspeter. 1989. "New Social Movements and the New Class in The Netherlands." *American Journal of Sociology* 94:1078-1116.
- Lipset, Seymour Martin. 1964. "The Changing Class Structure and Contemporary European Politics." Pp. 337-69 in *A New Europe?* edited by Stephen Graubard. Boston: Beacon.
- . 1981. *Political Man*, expanded ed. Baltimore: Johns Hopkins University Press.
- Luker, Kristin. 1984. *Abortion and the Politics of Motherhood*. Berkeley: University of California Press.
- Macy, Michael W. 1988. "New-Class Dissent among Social-Cultural Specialists." *Sociological Forum* 3:325-56.

- Offe, Claus. 1985. "New Social Movements: Challenging the Boundaries of Institutional Politics." *Social Research* 52:817-68.
- Raftery, Adrian E. 1986. "Choosing Models for Cross-Classifications." *American Sociological Review* 51:145-46
- Smith, Herbert L., and Maurice A. Garnier. 1987. "Scaling via Models for the Analysis of Association. Social Background and Educational Careers in France." Pp. 205-46 in *Sociological Methodology 1987*, edited by Clifford C. Clogg. Washington, D.C.: American Sociological Association.
- Weakliem, David. 1989. "Class and Party in Britain, 1964-83." *Sociology* 23:285-97.

Targets of Opportunity: Organizational and Environmental Determinants of Gender Integration within the California Civil Service, 1979–1985¹

James N. Baron
Stanford University

Brian S. Mittman
RAND Corporation and the University of California, Los Angeles

Andrew E. Newman
Ohio State University

This paper links organizational change to social inequality by examining how organizational dynamics affected rates of gender integration among California state agencies between 1979 and 1985. The analysis draws on theories of organizations and organization-environment relations to identify factors that influence economic, political, and social pressures for change, the costs of change, and capacities to change in a specific work setting. In conformity with those theories, it is shown that progress toward gender integration has been substantially influenced by the degree of external pressure and vulnerability, the relative sizes of various internal interest groups (e.g., women, nonwhites, unions) that favor or oppose integration, the extent of structural inertia to which an organization is prone by virtue of its size and age, and by characteristics of agency leadership. Some implications of these results for studies of organizations and of social inequality are discussed.

INTRODUCTION

Women have entered the labor force in unprecedented numbers, accompanied by dramatic increases in efforts to integrate workplaces by sex.

¹ An earlier version of this paper was presented at the 1988 American Sociological Association annual meeting in Atlanta. This paper was partially completed while the first author was a fellow at the Center for Advanced Study in the Behavioral Sciences; support from the Alfred P. Sloan Foundation and the Center staff is gratefully acknowledged. The second author was partially supported by the Behavioral Sciences

Accordingly, academics and policymakers have paid close attention to the magnitude and determinants of sex segregation, particularly because of its important consequences: the exclusion of women from certain occupations has been shown to benefit men and harm women economically and psychologically (see, e.g., Halaby 1979; Treiman and Hartmann 1981; Wharton and Baron 1987). Although recent studies suggest significant occupational integration in the last few decades (England 1981; Beller 1984), other research suggests that these studies mask extensive segregation of women into less privileged jobs, firms, and industries within occupations that merely appear to have become more integrated (Bielby and Baron 1984; Strober and Arnold 1987; Tienda and Ortiz 1987; Reskin 1988).

Given the upheavals organizations are facing in response to pressures for gender equity, surprisingly few studies have examined gender segregation in its organizational context. Bielby and Baron (1984, 1986) analyzed a sample of California establishments spanning the period from 1959 to 1979 and reported extremely high levels of sex segregation across diverse organizational forms and industries. They found that large, male-dominated organizations are more segregated and that "union contracts and formal bidding procedures, positional specialization of the workforce, reliance on firm-specific skills, and manual job tasks [also] facilitate employer strategies that either keep women out of the establishment completely or confine them in segregated job classifications" (Bielby and Baron 1984, p. 42). Growth and top-level organizational commitment to change were associated with progress in reducing segregation levels over time (also see Shaeffer and Lynton 1979; Roos and Reskin 1984; O'Farrell and Harlan 1984; Konrad and Pfeffer 1991).

This organizational research has expanded our understanding of gender inequality in significant ways beyond studies relying on more conventional occupational and individual-level data. However, despite calls to "bring the firm back in," there has been little systematic research on the

Department at the RAND Corporation, a National Institute on Aging FIRST award (5R29AG07676), and a grant from the National Science Foundation (SES 8922221). The authors received generous research support from the Stanford Graduate School of Business, including a Robert M. and Anne T. Bass Faculty Fellowship provided to the first author. Also acknowledged is assistance from the State Personnel Board, the State Controller's Office, the California State Employees' Association (Service Employees' International Union), Milada Belaya, and Albie Lau. Bill Bielby, Glenn Carroll, Yinon Cohen, Alison Davis-Blake, Dana Dunn, James Heckman, Keith Krehbiel, Don Palmer, Jeff Pfeffer, Peter Reiss, Ken Singleton, David Strang, and Nancy Tuma offered extremely helpful and patient advice. Requests for reprints should be sent to James N. Baron, Graduate School of Business, Stanford University, Stanford, California 94305-5015.

dynamics of organizational inequality in general and gender segregation in particular—that is, how changes in organizations help or hinder gender equity in the workplace. Similarly, although students of complex organizations have become increasingly interested in organizational adaptation and change, they have devoted little attention to changes in the organization of employment and opportunity per se.

This paper links the study of organizational change to the study of inequality by developing and testing hypotheses about how organizational dynamics affect gender desegregation. The following section surveys prevailing perspectives on organizations and develops hypotheses about how organizational dynamics influence progress toward gender integration at work. After describing the data, methods, and measures used to test these hypotheses, we report analyses of desegregation trends among California state government agencies between 1979 and 1985 and supplement those agency-level results with brief analyses of processes operating *within* agencies that have affected the success of integration efforts. We discuss the implications of our findings in the conclusion.

THEORETICAL PERSPECTIVES ON GENDER INTEGRATION IN ORGANIZATIONS

Most economic analyses of segregation patterns point either to changes in *labor supply and quality* as determinants of progress toward integration or else to changes in *segregation tastes and costs* among various constituencies, such as employers, customers, and unions (e.g., Becker 1971). Yet except for studying how government antidiscrimination enforcement may have raised the costs of ascriptive job assignments and wage allocations (see, e.g., Freeman 1981; Smith and Welch 1984; Leonard 1989), researchers have devoted little effort to examining why some work organizations integrate their work force faster than others. We believe sociological theories of organizations may be helpful in identifying factors that influence the economic, political, and social costs and benefits of integrating a specific workplace by sex. We view job integration as the net result of a series of organizational changes, involving new approaches to recruitment, selection, and promotion; career development; and job analysis and classification. Organizations are pressured to effect these changes by external and internal constituencies—such as affirmative action officers, external watchdog agencies, and female and nonwhite employees—who impose costs (in the broadest sense of the term) on agencies that do not respond. At the same time, not all organizations are equally vulnerable or responsive to pressure. Some organizations are insulated from external scrutiny by virtue of having clout or autonomy in their political and market environments. Moreover, there are impedi-

ments to change—especially in large, old, complex organizations with entrenched leadership—that potentially reduce the *capacity* to alter long-standing employment practices even in the face of considerable pressure for change.

Recent work in organizational sociology has identified various aspects of organizations and their environments that facilitate or impede change. We draw on this recent work to identify organizational factors likely to affect pressures for, costs of, and capacities to change segregated job assignments. Our perspective focuses principally on the demand side of the picture—why some organizations would be more able and willing to integrate—which has been relatively neglected in studies of gender inequality. We do not ignore the labor supply available to each organization, but instead ask, Relative to organizations facing similar labor-supply constraints, how quickly or slowly has a particular state agency become integrated?

Environmental Influences on Integration

Organizational theories such as population ecology, resource dependence, and institutionalization are typically portrayed as distinct or mutually exclusive paradigms. However, they often focus on different organizational phenomena (or different facets of the same phenomena), so it is often not clear to what extent they represent rival perspectives. This is especially true in applying these perspectives to the topic of gender integration, which has not been an explicit focus of theoretical or empirical work in any of these traditions. Accordingly, rather than develop a single, stylized “organizational theory” of gender integration, we draw instead on multiple perspectives to develop hypotheses about the determinants of sex segregation trends within California state agencies.

A main difference among theories of organizational change concerns whether they focus on the costs of adapting to environmental change or on the costs of *not* adapting. Ecological models of organizations, for instance, highlight factors that constrain an organization’s ability to adapt. In the context of gender integration, relevant environmental changes include the entry of large numbers of women into the labor force, rapid increases in their educational and professional credentials, and major changes in prevailing norms, laws, and interests regarding equal employment opportunity. Larger and older bureaucracies are assumed to exhibit greater structural inertia because change is economically and politically more costly in such settings. Moreover, stable procedures and routines allow organizations to reproduce and legitimate themselves externally over time and often develop an aura of inevitability for members, engendering moral opposition to change (Stinchcombe 1965; Carroll

1984a; Hannan and Freeman 1984). Accordingly, the population ecology literature suggests that small organizations and those founded more recently will be faster to desegregate, all else being equal.

On the other hand, Maniha (1975) and Meyer and Brown (1977) found that government agencies became increasingly bureaucratic and meritocratic in their personnel activities as they aged. Since desegregation is largely a process of modifying personnel practices, these findings suggest the opposite hypothesis: older agencies may integrate *faster* because one by-product of their maturity is more meritocratic personnel administration. These two streams of research thus suggest conflicting predictions about how organizational age might affect gender integration.

Other organizational theories highlight the costs of *not* responding to changes in environmental conditions. Resource dependence theorists, for instance, regard planned organizational changes as strategic responses designed to satisfy or preempt demands from external constituencies that control key resources (Pfeffer and Salancik 1978). In this vein, past research has documented greater egalitarian reform in those firms and industries subject to the strongest external pressures and most dependent on government purchases (Salancik 1979; Freeman 1981; Smith and Welch 1984; Dobbin et al. 1987). Constituencies that control critical resources (that are not elsewhere available) have the potential for influence; if a key constituency supports integration, then it presumably can pressure the organization to speed up remedial efforts.

Among California state agencies, the most critical resource is funding. Some agencies obtain funding from user fees and other special sources. Others obtain most of their revenues from federal agencies. Many agencies depend largely or entirely on the state General Fund and, accordingly, are controlled by the California State Legislature's budgetary discretions (although much spending is mandated by existing laws). State and federal officials have some responsibility for ensuring that agencies pursue employment equity. The State Personnel Board, as well as collective bargaining units representing state civil servants, prepare statistical reports documenting employment patterns by sex and race, which are distributed to legislators, the governor, and the media. Control over agency budgets may be a potent weapon available to the legislature and governor in encouraging more egalitarian employment practices. Accordingly, we hypothesize that budgetary dependence on the legislature or federal government accelerates integration relative to agencies that obtain funds primarily from user fees or other independent sources.

Yet resource dependence is not necessarily destiny. Political scientists (e.g., Moe 1987, pp. 486–88) have noted that budgets are often an ineffective control mechanism. Some agencies depend on the legislature for funding but nevertheless have greater institutional autonomy with re-

spect to the vagaries of the political process (and may thus be able to avoid pressures for employment equity). This autonomy has at least two sources. First, the mandate for some California state agencies is derived from the state constitution. Other agencies have a mandate that derives wholly or substantially from federal legislation. In these cases, even if legislators wished to reprimand agencies for not making progress toward gender equity, their ability to do so is restricted compared to that of agencies whose existence is entirely under the control of legislature. This suggests that, all else being equal, progress toward integration will be more rapid in agencies whose mandate is statutory (i.e., based on specific state legislation) than those whose mandate derives from the state constitution or federal law.

Second, institutionalization theorists argue that when it is difficult or costly to evaluate the efficacy of an organization according to objective technical criteria, external constituents may instead emphasize the *propriety* of an organization's procedures (Meyer and Rowan 1977; DiMaggio and Powell 1983). This reasoning suggests that agencies that can demonstrate their operating efficiency (e.g., the Franchise Tax Board, which collects state income taxes) may be better able to insulate themselves from scrutiny concerning processes not directly related to "the bottom line." In contrast, agencies that lack clear technical criteria for assessing performance (such as the Coastal Conservancy) may integrate faster because constituents place greater emphasis on procedures and policies in evaluating organizational performance.

One way in which the costs of not integrating the work force have been raised for California state agencies is through monitoring by the State Personnel Board (hereafter, SPB), a watchdog agency charged with monitoring and enforcing compliance with affirmative action and equal opportunity mandates. Near the beginning of the period we analyze, some agencies in our sample received "sanction orders" from the SPB for past deficiencies. These reprimands entail material and reputational costs to those agencies, including (potential) future SPB intervention in agency hiring decisions. We therefore predict that because of the potential loss of resources and autonomy involved, SPB reprimands will increase the rate at which agencies desegregate by sex.

Ecological perspectives conspicuously part company with resource dependence and institutional approaches in their predictions about how characteristics of top executives shape organizational evolution. Resource dependence theories suggest that changes in top management are an important means by which organizations adapt to environmental changes (Pfeffer and Salancik 1978, chap. 9; Fligstein 1985). Institutional theorists similarly emphasize the role that leaders and leadership changes play in legitimating an organization and in diffusing innovations, whereas

population ecologists argue that leaders can exert dominance only in smaller organizations, where failure to delegate is less problematic (Hannan and Freeman 1984, p. 158). Theories highlighting leadership effects lead to the hypothesis that turnover among agency leaders may promote faster integration since the influx of new blood at the very top of an agency may facilitate change. It has also been suggested that personal characteristics of the organizational leader can have important symbolic effects on organizations (see, e.g., Schein 1983); Kanter (1977) has argued, for instance, that the visibility of top-level females within an organization facilitates integration. Accordingly, we predict that progress toward integration is faster when the chief executive in an agency is a woman rather than a man. However, organizational ecologists would not expect executive turnover or gender to affect rates of desegregation, except perhaps in the smallest agencies (see Pfeffer 1977).

Internal Organizational Influences on Integration

Progress toward integration is also likely to be influenced by internal constituencies, constraints, and politics. First, as we show below, the *capacity* of an organization to integrate its work force (i.e., its "target level") depends substantially on its size, division of labor, and the occupation-specific labor markets from which it recruits. In addition, earlier research has documented that organizational arrangements and career opportunities are shaped by the play of various coalitions and interest groups within the enterprise (Granovetter and Tilly 1988; Pfeffer 1989).

First, we expect faster desegregation in organizations employing a high percentage of women (Bielby and Baron 1984; Konrad and Pfeffer 1991). Kanter (1977) argues that the power of women within organizations depends on their relative numbers (cf. Bridges 1982). Moreover, the evidence (in our sample and others) indicates that desegregation occurs primarily when women enter previously male-dominated positions (see, e.g., Beller 1984; Jacobs 1989). Thus, organizations with a high percentage of women contain a larger pool of candidates for movement into male-dominated jobs and face greater political (and potentially legal) demands for integration. Similar reasoning implies that agencies with well-established affirmative action programs will have both the capacity and resolve to integrate more quickly than comparable agencies lacking such programs.

Some authors (e.g., Bridges 1982) suggest that unions promote the interests of disadvantaged workers. Other work argues that unions, particularly in crafts and trades, perpetuate white male privilege, making

integration efforts more costly and disruptive (e.g., Aronowitz 1973; Marshall 1974; Bielby and Baron 1984; Roos and Reskin 1984). It has been alleged that craft, trade, and law-enforcement unions in the California civil service, traditional preserves of white male privilege, have been less than enthusiastic about gender integration, while other unions have been supportive. Accordingly, we distinguish the presence of craft, trade, and law-enforcement union members within each agency from the presence of other collective bargaining units and examine the impact of each type of unionization.

We also control for the ethnic composition of each organization but do not offer a directional hypothesis. It is sometimes claimed that there is a trade-off between remedying gender and ethnic inequalities (see, e.g., Malveaux 1985). On the other hand, women and ethnic minorities may share an interest in effecting organizational reforms necessary to undo discrimination that harms both.

We expect rates of integration in an organization to depend on the rates of new hiring, turnover, and internal promotion. The rate at which individuals are reassigned to positions is an important constraint on integration, since turnover obviously provides greater opportunities for staffing changes that remedy past segregation. In addition, if an organization is replacing personnel infrequently, then specific human capital, team production, and on-the-job training are presumably more salient, and economists argue that these are conditions that encourage male workers to indulge their "tastes for discrimination" (Becker 1971). Organizational growth provides opportunities to remedy segregation in much the same way as turnover does. Moreover, new female entrants may possess skills, credentials, and career orientations that make them better qualified for previously male-dominated positions than are women who entered the agency earlier.

In sketching our hypotheses, we have focused on the political and administrative costs associated with planned organizational changes (such as job integration) and on competition between different interest groups within organizations. Given that focus, we predict that organizations will rely more on growth and turnover in pursuing integration efforts than on internal promotions and changes to job definitions and career ladders. Politically and administratively, it is likely to be easier to desegregate by changing practices governing *entry* into an organization—that is, how future employees will be treated—than by changing practices governing job assignments and promotion affecting current incumbents, because of implicit contracts and traditions that develop in organizational cultures. Furthermore, entry portals usually involve larger numbers of incumbents and more frequent vacancies than

higher-level positions; consequently, hiring criteria and practices are likely to be more standardized among entry positions than upper-level slots.

Finally, our analyses control for major differences in the occupational composition of state agencies. Past research has documented the association of clerical work with women and blue-collar work with men, a pattern that may reflect employer stereotypes and discriminatory practices or sex differences in occupational socialization and labor supply. In any event, we expect slower progress in organizations relying on large contingents of clerical or blue-collar workers than in settings dominated by other kinds of occupations (professional, technical, administrative, managerial, and service work). Note that by controlling for differences in occupational mix, we are comparing each organization to others engaged in roughly similar tasks. Neoclassical economists emphasize patterns of occupational specialization by sex as an external constraint that produces segregation in firms (e.g., Polachek 1979). Therefore, we attempt to control as well as possible for the labor-supply constraints that neoclassical economists claim affect the capacity of an enterprise to integrate. (Later in this paper, we also report results from supplementary analyses that control for occupational composition in much greater detail.) In other words, by controlling for occupational mix, we ask, How fast is each agency integrating relative to other organizations that recruit from the same occupation-specific labor markets?²

DATA, MEASURES, AND METHODS

The Setting

The executive branch of California state government consisted in 1985 of approximately 120 standing agencies, boards, and commissions and several dozen temporary, special-purpose commissions. Total employment in the 120 agencies was approximately 150,000 as of March 1985, including over 120,000 full-time civil servants. California state agencies in 1985 ranged in size from commissions with fewer than 10 full-time staff members to departments with over 15,000 employees.

² We question economists' assumption that organizations face a division of labor and a set of occupation-specific (and gender segregated) labor markets over which they have no control. Other analyses of civil service systems, for instance, suggest that ascriptive distinctions have figured directly in how job classifications are structured, job worth evaluated, and markets defined (Bridges and Nelson 1989; DiPrete 1989; Baron and Newman 1990; Strang and Baron 1990). Nonetheless, we control for each agency's division of labor and occupational and gender mix to preempt the criticism that we overlooked technological and labor-market constraints outside each agency's control.

The California state civil service merit system contains formal rules, procedures, and policies governing virtually every aspect of personnel management. The California Civil Service Act of 1913 first called for the use of merit principles in staffing state agencies and created a Civil Service Commission to administer the new merit system and ensure compliance with the act. After several reorganizations, the commission was replaced in the mid-1930s by the SPB. A Department of Personnel Administration (DPA) was created in 1981 to administer the civil service salary system, and it has gradually gained jurisdiction over additional personnel matters formerly managed by the SPB—most notably, the centralized position-classification system. Other personnel functions, including testing and related aspects of selection, have increasingly been delegated to individual agencies in recent years. The result has been considerable decentralization of the state civil service system. This decentralization has not been complete, however. The SPB continues to administer employment activities involving agencies too small to have their own personnel function, it oversees “servicewide” job titles used by many agencies (e.g., general clerical classes), and it ensures compliance with statutory and other legal mandates governing EEO, affirmative action, and pay equity.

The California civil service is arguably as rationalized, scrutinized, and under pressure to reform as any personnel system. Because state government agencies are essentially monopolists, they may also have greater slack to absorb the short-run costs of integrating women than many private enterprises do (Killingsworth 1985). Our results thus provide a useful benchmark in assessing levels of segregation and rates of integration in contemporary organizations, since job assignments in the private sector are probably less equitable in general than in state agencies.

Data

The SPB and State Controller's Office generously provided computerized files containing quarterly staffing data for all state agencies between March 1979 and March 1985 and describing the ethnic and sex composition of each job title within each agency.³ Because measures of most

³ Shortly after we obtained these data, the Service Employees' International Union (AFL-CIO) filed a very large sex discrimination lawsuit against the State of California. We have had regular conversations with both parties to the litigation, keeping them informed about our analyses and seeking answers to specific queries. However, we have been steadfastly nonpartisan throughout the litigation. The state did not impose any quid pro quo in providing the data, other than requesting that we apprise them of our results and honor routine confidentiality requirements.

independent variables are unavailable quarterly, we used each of the seven March cross sections to construct a file describing annual changes in segregation levels within each agency. We excluded from consideration several commissions (most of whose members are not full-time civil servants) and a few agencies that never had 10 or more employees between 1979 and 1985. These restrictions leave us with a sample of 90 agencies, 83 of which existed throughout the entire period from March 1979 to March 1985.

Measures

Segregation indices.—Research on occupational segregation has traditionally employed the index of dissimilarity (hereafter, D) to assess differences in the work assignments of men and women (Duncan and Duncan 1955). For each agency, D equals

$$1/2 \sum_{i=1}^N |M_i - F_i|,$$

where M_i is the proportion of men in the agency in the i th job title, F_i is the proportion of women in the agency in that title, and N equals the number of job titles. The measure D describes the extent to which the percentage distributions of men and women across roles differ. We measure segregation at the detailed job level because this is also the level at which integration occurs—through changes in hiring, promotion, and job classification practices—and because this is the primary level at which gender discrepancies in employment are monitored by state personnel officials.⁴

However, there are some potential limitations in using D to measure segregation within organizations. For instance, if many workers are in job titles containing relatively few individuals, D may be biased upward simply because of the small numbers involved (Cortese, Falk, and Cohen 1976). Moreover, for policy purposes, one might prefer an index that penalizes a fixed amount of segregation in a job most when the agency

⁴ A reviewer noted that job integration does not necessarily measure improved opportunity for women. (For instance, if the percentage distributions of male and female faculty in a sociology department were identical across ranks and subsequently all female professors were promoted, D would represent this as an increase in segregation.) We measure progress toward job integration for several reasons: (a) it is something state agencies are trying to achieve (i.e., to have women and ethnic minorities represented proportionately throughout the job structure), (b) there is a wealth of previous research on job and occupational segregation, and (c) given the strong and well-documented relationship between sex segregation and pay inequality—female-dominated positions receive substantially lower rewards (Baron and Newman 1990)—analyses of the former are hardly irrelevant to the latter.

has a balanced sex ratio overall, and that gives greater "credit" for integration in highly skewed jobs than in moderately segregated ones (see Zoloth 1976).

We do not believe there is a *single* superior measure of sex segregation in organizations (cf. James and Taeuber 1985). Rather, we deal with these complexities in two ways. First, we specify a statistical model that includes a "target level" of segregation for each agency at each time point; this target level takes into account how the sex ratio and structure of job titles in an organization constrain its capacity to integrate (see Models and Methods below). Our statistical analyses thus identify two sets of factors that can impede an agency's progress toward gender integration: those that elevate its target level, making the appearance of a segregated division of labor more likely simply by virtue of chance fluctuations, and those that diminish the *rate of adjustment* toward the target, whatever it might be.

Second, we employ an alternative measure of segregation that is less subject to some of the shortcomings of D . Drawing on information theory, Theil and Finizsa (1971) propose an index that is a weighted average of the gender "entropy" (skewness) of jobs in the agency, divided by the entropy of the agency as a whole. Specifically, within an agency, they define the entropy of each job as

$$E_i = [p_i \cdot \log_2(p_i/p)] + \{(1 - p_i) \cdot \log_2[(1 - p_i)/(1 - p)]\},$$

where p_i is the proportion female in the i th job and p is the proportion female in the agency. If there are N jobs in the agency, T_i employees in the i th job, and T employees in the agency, then a measure of relative segregation can be computed by taking a weighted average of the E_i and dividing by the gender skewness of the agency as a whole:

$$H = \left\{ \sum_{i=1}^N (T_i/T) \cdot E_i \right\} / \{ [p \cdot \log_2(p)] + [(1 - p) \cdot \log_2(1 - p)] \}.$$

Like D , H is bounded between zero and one, expressing job segregation relative to the constraints imposed on integration by the overall sex ratio of the organization. This allows one to make relative comparisons across agencies and/or over time. We report results using D and H to gauge how sensitive our inferences are about the magnitude and causes of desegregation to the choice of a segregation index.

Independent variables.—Diverse data sources were used to develop measures of variables that we hypothesize to affect desegregation. *Agency size* equals the natural logarithm of full-time employment in an agency as of March 31 of each year and is based on computerized staffing files supplied to us by the SPB. *Sex (race) composition* is measured by the proportion of full-time employees in each agency who are female (non-

white). *Agency age* equals the number of years since the agency was founded, information that is based on a published history of California state agencies (Capell 1977).⁵

Agency occupational composition was measured from staffing information contained in each annual March employment cross section. For each agency, we measured the proportion of full-time workers in the following categories: professional, administrative, and technical; clerical; blue-collar;⁶ and "C.O.D." (a very small number of temporary Career Opportunities Development positions, designed to bring otherwise unqualified disadvantaged workers into state employment).

Sources of information on agency leadership were not always available each year for every agency, which makes it difficult to date turnover events precisely. To minimize missing data, we measured *turnover in agency leadership* by counting the number of leaders observed during the period for which we had data for a given agency and then dividing that figure by the number of years in that period.⁷ Similarly, we measured the *presence of female agency leadership* as the proportion of years between 1978 and 1985 (for which we had data) in which the agency chief was a female. (We also report some results from supplementary analyses based on the subsample of cases for which it was possible to measure year-by-year changes in agency leadership.)

Measures of *budgetary dependence on federal agencies and the state legislature* were obtained from California's annual budget volumes. For each state agency, we computed the proportions of its operating budget received from the General Fund and from federal sources (with the remainder coming from user fees or other special sources).⁸ Since we believe

⁵ Population ecologists suggest that major restructurings replicate some of the effects of organizational founding, serving to realign organizations with their environments. We therefore measure agency age as the number of years since founding or most recent reorganization, whichever is smaller. Because the focus on gender integration is relatively recent, differences in organizational age may be irrelevant among relatively old organizations. We therefore include a term measuring squared deviations from the sample mean to investigate nonlinear effects of age.

⁶ This category consists of semiskilled workers, laborers, and supervisory and nonsupervisory personnel in crafts and trade, law enforcement, or janitorial/custodial work.

⁷ We will have undercounted turnover in some agencies if there were multiple changes in leadership during the interval between observations. If the chief executive slot was vacant at the beginning or end of the observation interval (but not both), that vacancy was counted as equivalent to a completed turnover event.

⁸ In calculating budget figures, we excluded "local assistance" monies received by some state agencies, which they merely transfer to other governmental jurisdictions within the state. We assumed that agencies that distribute large blocks of state or federal local assistance money to cities or counties are not under the same pressure to exhibit employment equity as are agencies receiving comparable amounts of state or federal money to conduct their own activities.

agencies receiving *any* federal funds (excluding local assistance monies) are subject to federal scrutiny, we include a dummy variable denoting such agencies rather than a measure of the proportion of operating funds received from Washington.

Annual state budget books also list the specific authority for each program in which an agency is involved, and we used this information to measure the *extent of legislative scrutiny* implied by each agency's mandate. We created two dummy variables to identify agencies whose principal mandate stems from the state constitution and those whose mandate derives principally from federal enabling legislation. The omitted category represents agencies with a mandate derived from state legislative statutes (or executive order); we hypothesized that these agencies can most easily be scrutinized and manipulated by the legislature, governor, and other state constituencies outside the agency. We measure the *objectivity of output* for each agency with a dummy variable that equals 1 if the agency provides any quantitative output measures in its annual reports to the legislature.

We measure *monitoring pressures from the SPB* with a dummy variable denoting agencies under SPB reprimand since 1980–81. *Unionisation* is the proportion of full-time employees in each agency serving in "rank and file" classes. We also include a measure of the proportion of full-time employees who are members of noncraft unions so that we may examine whether craft and trade unions differ from other types in their effect on gender integration.

A dummy variable denotes the *presence of an affirmative action program* for a given agency in a given year. (This variable is omitted in analyses limited to larger agencies, all of which are required to have affirmative action programs.)⁹ Among agencies with affirmative action programs, we also have data on personnel flows, which are used to measure *personnel replacement rates and promotion rates*. For each agency in year t , the annual replacement rate is defined as the number of new hires during the previous year divided by average agency employment during that year ($1/2$ [$\text{employment}_{t-1} + \text{employment}_t$]). Promotion rates for each year were measured as the number of workers promoted during the previous year divided by average agency employment.¹⁰

⁹ In supplementary analyses, we examined whether the *age* of affirmative action programs had any effect among agencies having them. There was little evidence of an effect. Moreover, almost all agencies adopted their programs in 1977, so essentially this variable is merely equivalent to including a linear trend term (for calendar year).

¹⁰ Promotion rates computed separately for male and female employees were very highly correlated; therefore, our measure is based on promotions among employees of both sexes. As described below, our dynamic models relate current rates of adjustment to levels of independent variables one year ago. By expressing replacement and promo-

Models and Methods

To test our hypotheses about the determinants of change in segregation levels, we employ a linear partial-adjustment model similar to one applied by Strang (1987) in studying school district consolidation. The model takes the form

$$d[Y(t)]/dt = R(t)[Y^*(t) - Y(t)], \quad (1)$$

where $R(t)$ is the rate of adjustment, expressing how quickly each agency is approaching its target level of integration at time t ; and $Y(t)$ is the level of segregation at time t . Here $Y^*(t)$ represents each agency's "target level"—a minimum level of gender segregation that is possible, given its organizational configuration, toward which the agency is posited to adjust but which social forces might resist. The target can change over time as certain characteristics of the agency change. In particular, we specify the target as follows:

$$Y^*(t) = \exp\{B_0 + [B_1 \cdot \text{JTD}(t)] + [B_2 \cdot \text{GI}(t)]\}. \quad (2)$$

Here, $\text{JTD}(t)$ represents "job title differentiation," which is measured by calculating the number of job titles per full-time employee in years $t - 1$ and t and taking the natural log of the average.¹¹ Whether the proliferation of job titles reflects technical exigencies of the division of labor, or instead reflects an effort to balkanize men's from women's work (see Bielby and Baron 1986; Strang and Baron 1990), it is clear that by reducing the average number of incumbents in each slot, job title differentiation reduces the amount of measurable integration we are likely to observe.

In equation (2), the target is also dependent on GI , a measure of "gender imbalance" within each agency at each time point. Specifically, $\text{GI}(t)$ equals the absolute value of the difference between 0.5 and the average proportion of women employed in the agency between time $t - 1$ and time t . Whether an agency has a skewed sex ratio due to discrimination

tion rates as a percentage of the average employment in each agency over the previous year, our measures provide instantaneous rates with approximately a six-month lag. Similarly, rates characterizing the agency in year $t - 1$ provide instantaneous rates with about an 18-month lag from year t (the average of 12 and 24 months prior). By averaging the rates lagged 6 and 18 months, we obtain instantaneous replacement and promotion rates lagged roughly one year prior to the current year, which are the measures used in our longitudinal analyses. Promotion data gathered by the state describing 1978–79 were not strictly comparable to the other years; we treated the variable as missing for that year, and the promotion measure for 1980 observations is based only on 1979–80 information (lagged back six months, rather than one year).

¹¹ In other words, each agency's target for a given year is constrained by the average amount of job title differentiation throughout the previous year.

or due to labor-supply considerations, it is not expected to be capable of displaying as much parity in its job assignments as one having 50% female employees. The final term in equation (2), B_0 , is a constant.

To gain some insight into how differences in job structure and sex composition affect segregation indices, we also conducted Monte Carlo simulations for each agency. We preserved the existing sex ratio and job title configuration of each agency and staffed jobs randomly (with replacement) according to a binomial distribution, with p equaling the actual proportion of women in the agency. After staffing each job accordingly, we calculated D and H for the agency.¹² Regression analyses relating those baseline estimates to our measures of job title differentiation and gender imbalance informed our specification of the target level portion of our dynamic model; the functional form in equation (2) provided a very good fit.

In the discrete-time version of our dynamic model, changes in gender segregation are related to target levels as follows (see Tuma and Hannan 1984, chap. 11):

$$Y(t) - Y(t - 1) = R(t) \cdot [Y^*(t) - Y(t - 1)]. \quad (3)$$

Here, $R(t)$ describes the rate of adjustment of each agency toward its target at year t . The final part of our model posits that

$$R(t) = A + U \cdot X(t - 1) + C \cdot F, \quad (4)$$

where A is a constant, $X(t - 1)$ is a vector of annually changing variables describing the agency the previous year, F is a vector of variables measuring fixed characteristics of each agency that do not vary over the period under study, and U and C are vectors of parameters.¹³

Substituting equations (2) and (4) into equation (3) yields the nonlinear model of change we estimated.¹⁴ For an agency in existence throughout

¹² For instance, for a job having 10 incumbents in an agency that was 30% female, we randomly drew an integer X from 0 to 10 according to a binomial distribution with $p = .3$, filling the job with X women and $(10 - X)$ men. After staffing each job accordingly, we calculated D and H for the agency. We performed 100 such simulations for each agency in each year, taking the mean values of the 100 simulated D and H indices as estimates of the baseline level of segregation the agency could be expected to display.

¹³ We also estimated models positing a two-year lag in eq. (4), suspecting that given the one-year planning horizon of state agencies, characteristics at time t might affect personnel budget requests and outcomes at time $t + 1$, thereby not shaping staffing patterns until time $t + 2$. We obtained very similar results.

¹⁴ Initial analyses revealed scant evidence of autocorrelation, but the variance of residuals decreased with agency size. Accordingly, models were estimated by multiplying the left- and right-hand sides of eq. (3) by the square root of agency employment in year t . (Summary regression statistics reported in tables, such as R^2 , were calculated

the entire 1979–85 period, our data file would contain six observations: the first record would contain measures of segregation in 1980, the time-varying independent for variables 1979 and 1980, the fixed organizational characteristics (such as agency mandate), and a variable denoting this as a 1980 observation; the second record would describe the 1980–81 period, and so on. We used the procedure CNLR in the SPSS-X statistical package (version 3.0).

RESULTS

Descriptive Statistics

Table 1 reports descriptive statistics on segregation levels in March of 1979 and 1985 (for agencies in existence at both time points) and changes during the intervening six years. The table includes unweighted descriptive statistics as well as statistics for each agency weighted by its employment size. For the median agency, D was approximately .70 in 1979; the median value for H was .54. When these numbers are weighted by 1979 agency employment, so as to represent the situation characterizing the typical state *worker* rather than the typical state agency, the corresponding medians are substantially lower: approximately .61 and .43, respectively.

Whether table 1 is more noteworthy for the change it documents or for the persistent segregation it reveals depends on one's perspective. On the one hand, these state agencies remain considerably more segregated than they would be by chance. Consider, for instance, the most "forgiving" estimate of 1985 segregation levels in table 1: a median value of .43 for H (when weighted by 1985 agency size). Computed in the same way, our Monte Carlo simulations indicated that the typical state employee was in an agency in which H would have equaled .04 if differences in the job distributions of men versus women were purely random. Similarly, the weighted results in table 1 indicate a median of about .62 for D in 1985, compared to an expected value of .11 if sex ratios within jobs deviated from the overall agency sex ratio only by chance.

On the other hand, table 1 documents substantial gender integration within the typical state agency: a median decline of 9% in D and roughly 15% in H . The size-weighted statistics reveal even greater declines in larger agencies—15% in D and nearly 20% in H over the six-year period.

by applying these corrected parameter estimates to untransformed data) To facilitate discussion of change, we estimated eq. (3) in difference form, rather than treating $y(t)$ as the dependent variable (which would produce identical results except for larger coefficients of determination). We also estimated continuous-time formulations of eq. 3, obtaining very similar estimates to those reported here.

TABLE 1
DESCRIPTIVE STATISTICS: CHANGES IN GENDER SEGREGATION WITHIN 83 STATE AGENCIES, 1979-85

VARIABLE	MARCH 1979				MARCH 1985				PERCENTAGE CHANGE			
	\bar{X}	Median	Range	σ	\bar{X}	Median	Range	σ	\bar{X}	Median	Range	σ
Unweighted												
Sex segregation (D)	759	.761	429-1 00	.133	695	.697	390-1 00	.137	-8.0	-9.0	-37.6-42.9	12.6
Sex segregation (H)	.644	.656	258-1 00	.183	.561	.538	.229-1.00	.178	-11.9	-15.3	-58.1-64.9	18.4
Proportion female. . . . .	.486	.500	.087-.917	.178	.527	.563	.127-.846	.165	11.9	7.7	-18.2-59.7	16.0
Full-time employment	1,385.3	253.0	8-15,488	2,758.2	1,476.1	292.0	7-15,265	2,893.9	17.5	7.2	-55.2-437.5	65.4
Weighted by agency employment*												
Sex segregation (D)	677	.690	429-1 00	.168	590	.615	390-1.00	.135	-13.3	-14.5	-37.6-42.9	6.9
Sex segregation (H)	.524	.504	258-1 00	.197	.422	.428	.229-1.00	.145	-19.5	-19.9	-58.1-64.9	9.6
Proportion female. . . . .	.423	.525	.087-.917	.208	.441	.496	.127-.846	.198	13.9	9.0	-18.2-59.7	12.3
Full-time employment.	6,810.6	6,083.0	8-15,488	5,299.1	7,081.3	6,545.0	7-15,265	5,226.0	12.0	9.4	-55.2-437.5	27.5

* Weighted statistics for March 1979 use 1979 employment data, all other weighted statistics are weighted by 1985 employment.

For instance, in the Department of Motor Vehicles, D declined from .70 to .46 between 1979 and 1985, and H decreased from .47 to .27; similarly, in the California Highway Patrol, D dropped from .91 to .72 and H fell from .81 to .58. Both of these agencies have characteristics that organizational theorists associate with inertia, having been founded early in this century and each employing more than 6,500 people in more than 90 separate locations. Our dynamic analyses assess whether the apparent progress within larger agencies is real or instead reflects the artificial tendency for segregation indices to portray small agencies as very segregated.

Segregation levels appear lower and the declines greater in California state government than in the private economy. Table 1 certainly displays lower segregation indices than the sample of smaller (mostly private-sector) establishments analyzed by Bielby and Baron (1984), which represented staffing patterns between 1959 and 1979. Moreover, the average amount of change seems fairly large (cf. Bielby and Baron 1984, pp. 48–50; and Northrup and Larsen's [1979] analysis of the Equal Employment Opportunity Commission's consent decree with AT&T). We next examine the organizational and environmental factors that have favored and hindered integration.

Dynamic Analyses

Tables 2 and 3 report results from our discrete-time linear partial-adjustment models.¹⁵ Table 2 reports parameter estimates separately for analyses of D and H , along with the t -ratio of each coefficient to its asymptotic standard error.¹⁶ Table 2 also reports separate estimates from analyses restricted to agencies that had 50 or more employees in every year, 1979–85 (see cols. labeled "50+"). As noted above, segregation measures can produce misleading results in very small agencies. If our "target level" specification does not fully compensate for this, then we might expect different results among agencies of moderate to large size. Moreover, certain variables—particularly organizational scale—may affect rates of integration differently when we omit small organizations

¹⁵ In these analyses, all independent variables that are percentages are expressed as proportions, ranging from 0 to 1, and organizational age has been transformed from years into centuries (i.e., divided by 100), in order to prevent large data values from adversely affecting the nonlinear estimation routine used.

¹⁶ Note that no error terms appear in the expressions for the model and its subcomponents (see eqq. [1]–[4]). Stochastic treatments of the type of model we estimate are extremely complex (see Tuma and Hannan 1984). We use the asymptotic standard errors only to gauge the stability of the estimates, and we rely on the absolute size of coefficients, not just the standard errors, in interpreting the "significance" of effects.

from the sample. Finally, state government agencies having 50 or more employees must have an affirmative action plan, which requires that they make annual reports on promotion rates and personnel replacement rates; comparable statistics were not available to us for the smaller agencies. Therefore, we supplement our specification by examining in table 3 the effects of lagged promotion and replacement rates on rates of integration within this subset of organizations.

Table 2 reveals fairly similar portraits of change, regardless of which measure of segregation is employed and whether small organizations are excluded. Before discussing specific coefficients, it is worth noting that our dynamic model appears to be well specified. For example, although the target level for D and H by definition cannot exceed 1.0, there was no such constraint imposed explicitly on our models. Yet all observations had predicted targets well within that range. Even more striking is the correspondence between the target levels predicted in table 2 and the results of our independent Monte Carlo simulations of D and H for each agency (see n. 12 above). For both D and H , the predicted targets in table 2 ("All") tend to be somewhat higher in absolute level than their simulation counterparts but almost perfectly correlated ($r = .97$). Thus, the models in table 2 differentiate state agencies in terms of their *relative* capacities to integrate in almost exactly the same way as our Monte Carlo simulations did.

As hypothesized, the target level for each agency depends on the extent of job title differentiation, with the predicted target being higher in those agencies having a large ratio of job titles to employees. The (antilogged) constants in table 2 imply, for instance, that an agency having one worker per job and perfect gender balance (50% female) would have a target level of .93 for D and .95 for H . Because only the smallest agencies exhibit extreme gender imbalance, the effect of that variable—which was strong and significant in unweighted analyses not reported here—is insignificant in the size-weighted analyses in tables 2 and 3. Because few state agencies experienced enormous changes in their size, job title differentiation, or sex ratio during this period, their estimated target levels were quite stable over time. Among agencies in existence throughout 1979–85 (based on the "All" estimates in table 2), the median agency in 1980 had estimated target levels of .625 for D and .478 for H , and almost identical values in 1985. (Not surprisingly, targets were lower among larger agencies: the median employee was in an agency whose predicted 1980 targets for D and H were .410 and .231, respectively.)

Table 2 also reports the effects of independent variables on the rate of adjustment of agencies toward their targets. The models for all agencies estimate the average rate of adjustment between year $t - 1$ and t to be .171 for D and .184 for H . (For the "50+" analyses, the corresponding

TABLE 2
DYNAMIC ANALYSES OF GENDER INTEGRATION IN CALIFORNIA STATE AGENCIES, 1979-85

VARIABLE	D				H			
	Effect		t		Effect		t	
	All	50+	All	50+	All	50+	All	50+
Target level								
Constant	-.073	-.097	-1.303	-1.353	-.052	-.087	-.663	-.801
Job title differentiation	.272	.269	9.760	7.555	.451	.445	9.738	7.162
Gender imbalance	.191	.276	.797	.941	.117	.187	.377	.480
Rate of adjustment								
Constant	.422	.305	2.894	2.357	.465	.332	3.397	2.637
Log employment	-.019	-.014	-2.232	-1.567	-.023	-.017	-2.838	-1.970
Proportion female	.165	.144	2.346	1.937	.160	.123	2.074	1.538
Proportion nonwhite	.163	.173	1.934	1.920	.085	.096	1.023	1.116
Agency age*	.026	.035	.846	1.086	.017	.026	.596	.873
Agency age squared*	.160	.139	2.371	1.993	.202	.179	2.749	2.419
Receives federal funds	.005	.004	.254	.162	.026	.022	1.082	.912
Proportion of budget from General Fund...	-.014	-.017	-.680	-.798	.000	-.003	.022	-.157

TABLE 3

EFFECTS OF PERSONNEL PROMOTION, REPLACEMENT, AND GROWTH RATES
ON GENDER INTEGRATION IN CALIFORNIA STATE AGENCIES, 1979-85

VARIABLE	<i>D</i>		<i>H</i>	
	Effect	<i>t</i>	Effect	<i>t</i>
Target level:				
Constant.....	-.230	-3.180	-.305	-2.968
Job title differentiation .. . . .	.209	7.223	.347	7.151
Gender imbalance. ....	.118	.381	-.120	-.275
Rate of adjustment				
Constant.....	.216	1.671	.164	1.374
Log _e employment	-.010	-1.027	-.011	-1.387
Proportion female.....	.197	2.664	.150	2.062
Proportion nonwhite .. .	.139	1.606	.055	.735
Agency age* ..	.029	.955	.026	.970
Agency age squared*. ..	.094	1.404	.065	1.001
Reserves federal funds .. .	.004	.191	.026	1.187
Proportion of budget from General Fund	-.021	-1.045	-.011	-.535
Proportion unionized... ..	-.176	-1.227	-.142	-1.104
Proportion in noncraft unions.....	-.016	-.317	-.004	-.094
Proportion blue collar .....	.033	.567	.043	.829
Proportion clerical .. .	-.187	-1.741	-.134	-1.279
Federal mandate .. .	-.040	-1.876	-.021	-1.034
Constitutional (state) mandate .. .	-.028	-1.200	-.006	-.282
Objectivity of output .. .	-.014	-.822	.006	.377
SPB reprimand .. .	.042	1.568	.030	1.206
Turnover in agency leadership ..	.066	.786	.013	.164
Female agency leader	-.017	-.548	-.001	-.048
Annual promotion rate†.....	.176	1.390	.515	3.487
Annual replacement rate† .. .	-.175	-1.516	-.173	-1.269
Agency employment growth‡.....	.568	5.034	.741	6.497
Mean of dependent variable.....	-.013		-.015	
Standard deviation .....	.039		.046	
<i>R</i> ² .. .	.163		.216	
SE of estimate .. .	.036		.041	
<i>N</i> of agencies .. .	71		71	
<i>N</i> of observations (agency by year).....	409		409	

NOTE.—Dependent variables are annual changes in *D* and *H*. Regression analyses are weighted by square root of employment size to correct for heteroscedasticity (*R*² and SE of estimate calculated by applying corrected estimates to unweighted data). Results pertain to state agencies having 50 or more employees throughout 1979-85 period.

* Age equals number of years since the agency was founded or last reorganized, divided by 100. The quadratic term represents squared deviations from .385 (approximate mean age in sample).

† See text for definition of these variables.

‡ Growth equals log employment (time *t*) minus log employment (time *t* - 1).

means are .135 and .145, respectively.) These results corroborate our interpretation of table 1. On the one hand, state agencies were apparently achieving substantial progress toward integration during the period under study. On the other hand, segregation remained well above target levels: the average agency's distance from target (weighted by size) was .22 for *D* and .23 for *H* in 1980 and .15 for both measures in 1985; and over 90% of full-time civil servants were employed in agencies above their segregation targets in 1980 and 1985.

By way of background, a brief description of how agencies varied in their segregation level in 1979, the beginning of the period, may be informative. Cross-sectional analyses (size-weighted) reveal that many of the factors that speed adjustment in our dynamic analyses were also associated with lower initial segregation levels. Segregation in 1979 was markedly lower in large agencies and those with high proportions of female and nonwhite employees and was somewhat higher among agencies that lacked an affirmative action program, were unionized along craft lines, were clerical intensive, derived their mandate from the state constitution, reported objective quantitative output measures (i.e., had well-defined core technologies), were not dependent on the General Fund for revenues, or experienced frequent chief executive turnover in the ensuing six years. We also estimated regression models that controlled for the segregation level each agency would be expected to display *by chance* in 1979, given its size, job distribution, and sex. (We used the results of our Monte Carlo simulations [see n. 12 above] to measure that expected segregation level for each agency.) The effects of size and affirmative action programs vanish in those analyses; in other words, large agencies and those with affirmative action programs were already less segregated in 1979, but apparently only because they already had larger job classifications and more balanced sex ratios.

We turn next to the determinants of agencies' rates of adjustment. The estimates in table 2 demonstrate the value of disentangling the determinants of targets from factors influencing speed of adjustment. For instance, the net effect of organizational size is, as expected, to lower the target level. (Current size enters into the denominator of our measure of job title differentiation; thus, if the number of job titles is held constant, increases in organizational size reduce job title differentiation, in turn lowering the target.) Table 2 shows, however, that lagged size actually *diminishes* substantially the rate of adjustment, as theories of organizational inertia would predict.

The effect of organizational age appears more complex than anticipated. The main effect of age is small, relative to its asymptotic standard error. However, the term measuring squared deviations from the sample average reveals a substantial positive effect, which suggests that the

youngest and oldest organizations are adjusting fastest. Within this sample, $d[R(t)]/d[\text{age}]$ is, as hypothesized, negative among young organizations; for instance, at an age of five years, it equals $-.08$ for D and $-.12$ for H . However, the derivative actually becomes positive after organizations reach an age of approximately 36 years. Our findings thus indicate that the salutary effect of "youth" is most pronounced among recent cohorts of organizations, that is, among organizations founded or reorganized during the recent climate of concern with gender equity at work.

This curvilinear relationship might reconcile the two seemingly competing predictions we derived for the effects of organizational age. Younger agencies may be adjusting faster because of the imprinting of recent environmental changes, in conformity with population ecologists' predictions. On the other hand, very old "survivor" agencies that have not recently been reorganized may be adjusting faster because of the increased rationalization, continuity of procedures, and adaptability to environmental pressures associated with their longevity. Indeed, their success at having responded adroitly to environmental changes in the past may help explain why they have survived so long.

Our results suggest that exposure to external scrutiny increased rates of adjustment, as predicted, while autonomy had the opposite effect. Organizations reprimanded by the SPB, for instance, adjusted somewhat faster than otherwise comparable agencies did. So did agencies whose mandate derives from state legislative statutes, which are presumably subject to greater scrutiny and pressure from legislative overseers than agencies with a constitutional or federal mandate. The net effects of budgetary sources were generally small relative to their standard errors, however. This may be due to the moderate association between agency mandates and budget sources, to errors on our part in measuring and specifying these budgetary effects, or to the inherent difficulty of controlling agencies through legislative budget allocations. In any event, the speed of adjustment is apparently influenced more by scrutiny from state watchdogs and by the extent to which an agency's mandate authorizes or impedes oversight by the legislature than by the relative magnitude of budgetary dependencies. Budgetary autonomy need not insulate an agency from scrutiny by an aggressive legislature (and certainly not from the SPB), whereas institutional autonomy, reflected in the agency's mandate and mission, may provide more "protection."

Table 2 provides little support for our hypotheses concerning chief executive gender and turnover. However, recall that we based our measures of leader turnover and gender on the entire 1979–85 period in order to minimize missing data. In supplementary analyses, we estimated models on the smaller subsample of cases having data available on year-

by-year leadership changes. We constructed a dummy variable coded 1 if agency leadership changed within the previous two years, 0 otherwise, and a second variable coded 1 if the agency had female leadership throughout the two-year period, 0 if it had exclusively male leadership, and 0.5 if it had a mixture.

These revised variables had positive effects on rates of adjustment (effects of other variables in table 2 were unchanged). In analyses of all agencies, leadership turnover increased the rate of adjustment by .03 for both *D* and *H* ($t = 3.55$ and 3.66 , respectively), and an agency with female leadership for the preceding two years is predicted to have adjusted 2% faster than an otherwise comparable agency without any female leadership ($t = 1.90$ for *D*; $t = 1.78$ for *H*). The effects of leader turnover and gender persist in analyses restricted to the "50+" subsample of agencies, which suggests that there is no difference between smaller and larger organizations in the impact of leader characteristics.

It is interesting, however, that the effects of turnover are reduced substantially (and those of female leadership moderately reduced) in supplementary analyses that added period (year) dummies to the model. A close look at the data, as well as discussions with state government officials, suggests that this reflects the transition from the (Democratic) Brown administration to the (Republican) Deukmejian administration in 1982–83. In this period, new leaders were appointed in 64% of the agencies for which we had complete data, in response to the gubernatorial change; by contrast, succession in the remaining years ranged from a low of 7.9% in 1984–85 to a high of 20% in 1979–80. Women also represented a considerably smaller percentage of agency leaders after 1982–83 than they had before. Insiders speculate that the Deukmejian replacements were less committed to egalitarian reforms and that this began to manifest itself during the second year of their tenure (1984–85), the first year when they would have had complete budgetary control. In support of that claim, the period effects show substantially slower adjustment (3%–5% less) in 1984–85 than in any other. This was also the period of lowest leadership turnover, after the flood of postelection replacements had subsided, which may account for the apparent association between leadership turnover and faster adjustment. This interpretation is admittedly speculative, but the results underscore that executive succession takes on special significance in the public sector because of its association with changes in political party control.¹⁷

The effects of observability of output were weak. Our analyses have

¹⁷ Controls for period effects actually increase the effects of the proportion nonwhite and the proportion clerical in tables 2 and 3, but do not otherwise alter any other coefficients.

already controlled more precisely for various characteristics of agencies that entail close external scrutiny or pressures for reform. Moreover, given the highly politicized environment of government agencies, perhaps there is no tenable distinction between "technical" and "institutional" criteria in evaluating agency performance. Therefore, we cannot discern whether the lack of results in the predicted direction reflects idiosyncrasies of our sample, the limits of institutional theory, or simply how we operationalized and tested the theory here.

Our results highlight how various coalitions within organizations influence the speed of adjustment. As hypothesized, agencies with the largest proportions of women adjusted faster, even after we take into account the relationship between sex composition and target levels. This effect is less pronounced among larger agencies, according to the "50+" results in table 2. Although not terribly large relative to their standard errors, the lagged effects of the proportion nonwhite are also positive and nontrivial. For instance, among all organizations, our model predicts that a difference of 2 SDs in the proportion nonwhite (about .22) is associated with net increases of .036 and .019 in the predicted rate of adjustment, based on *D* and *H*, respectively.

As has past research, our results suggest a connection between unionization and persistent gender segregation (Bielby and Baron 1984; Reskin and Roos 1984). Comparison of the "50+" columns in table 2 with their counterparts in table 3 reveals, however, that much of this effect is due to lower growth and promotion rates in highly unionized agencies. (We also present some evidence below suggesting that the negative unionization effect partly reflects the highly sex-segregated labor markets from which unions draw their members.) Tables 2 and 3 provide no evidence that craft and trade unions differ from other collective bargaining units in their effects on gender integration (all else being equal); nor are there net effects of broad occupational specialization (proportion manual and proportion clerical) on rates of integration in table 2 (but cf. table 3).¹⁸

Finally, one of the most intriguing results in tables 2 and 3 is the lack of evidence that the existence of an affirmative action program speeds adjustment. Indeed, the effect is the other direction. While having a program is obviously related to organizational size,¹⁹ that does not explain this result: the affirmative action dummy has strong and significant *nega-*

¹⁸ Not surprisingly, the proportion manual is rather highly correlated with unionization, as is the proportion clerical with the proportion female, and their associated parameter estimates are also correlated.

¹⁹ Having an affirmative action program (which 82.4% of the observations do) has a correlation of .61 with log size.

tive effects ($b = -.19$ for D and $b = -.14$ for H) in a model in which only it and a constant determine the adjustment rate, and those effects persist after size is controlled.

One possible explanation for this finding is that agencies with long-standing affirmative action programs are in a sense victims of their own past successes. As noted above, cross-sectional regressions predicting 1979 segregation levels showed that agencies with affirmative action programs were already less segregated at the beginning of the period we are studying: about 10 points lower on D and 15 points lower on H . At the same time, these agencies had especially low target levels and thus actually began the period spanned by our study farther from their agency-specific targets.²⁰ Efforts by affirmative action offices to streamline job classification systems and to achieve a balanced sex ratio within the agency apparently have, as intended, increased the *capacity* for integration. Thus, affirmative action programs apparently reduced segregation levels before the period of our study, but they reduced target levels even more, producing a greater distance from the target for agencies with affirmative action programs. Recall that, all else being equal, the rate of adjustment in a linear partial-adjustment model diminishes with distance from the target (see Tuma and Hannan [1984], chap. 14 and our eqq. [1] and [3] above).

Table 3 reports the effects of employment growth, replacement, and promotion rates among agencies with 50 or more employees. Each of these three variables exhibits a strong positive effect on the speed of adjustment when the other two are not controlled. However, net of one another, growth exhibits the strongest positive influence.²¹ Agencies with high rates of promotion were also faster to integrate.²² However, there is a modest *negative* net effect of replacement or turnover on the rate of

²⁰ To corroborate this, we estimated regressions in which the dependent variables were our 1979 Monte Carlo estimates of "expected random segregation" in each agency. When the observed segregation level, size, gender composition, and the like were controlled, the affirmative action dummy variable had a strong negative effect, which suggests that agencies with affirmative action programs tended to be farther from their integration targets in 1979 than otherwise comparable agencies with the same level of observed segregation.

²¹ The effect of growth is reduced slightly when smaller agencies are included; adding growth to the model for all agencies in table 2 yields coefficients of .534 ($t = 5.69$) and .673 ($t = 7.60$) for D and H , respectively.

²² As noted above (see n. 10), there is some lack of comparability in the measure between 1980 and other years. When the model in table 3 is reestimated after excluding 1980 observations, the effect of promotion rates is slightly larger .276 ($t = 1.61$) and .521 ($t = 3.02$) for D and H , respectively.

integration. Net of growth and promotion rates, personnel replacement appears to have been greatest in agencies with short-term or "project" work drawing from sex-segregated labor markets, such as male foresters and cooks in the Conservation Corps, female office assistants at the Housing Finance Agency and Student Aid Commission, and female program analysts in the Department of Aging. This may explain why, despite more frequent hiring opportunities, segregation persists in these agencies.

The finding that growth is relatively more important than promotion in speeding up integration efforts is consistent with our hypothesis that it is less costly to implement change within bureaucracies vis-à-vis new people and positions than among existing members, who are bound by implicit contracts and organizational traditions. Interestingly, a similar pattern characterizes efforts by these same state agencies to redress pay inequities; penalties against jobs dominated by women and nonwhites appear to have been reduced primarily by realigning the prescribed pay rates of new civil service jobs, rather than by recalibrating the worth of older positions (see Baron and Newman 1990).

Additional specifications.—In supplemental analyses, we modified the models reported in tables 2 and 3 (details available on request). None of these modifications affected the pattern of results substantially. For instance, we undertook supplemental analyses to determine whether our findings might simply reflect (or mask) labor-supply considerations. Our analyses controlled for agency occupational composition and allowed target levels to vary with job specialization and overall sex ratios, but some readers may not believe this adequately captures differences in labor-supply constraints. One reviewer suggested, for instance, that it is the segregation of men from women across general types of work roles (occupations) that is relevant, rather than across detailed statuses and organizational locations. Although we disagree with this view, it is inconsequential for our analysis. We computed segregation measures across the 99 broad occupational categories used by the state to capture distinct segments of the labor market. The indices had correlations of from .86 to .90 with their counterparts (based on detailed job titles) analyzed in table 2.

Some readers may also question whether we have properly specified each agency's target level. We might have omitted important exogenous variables that influence the capacity to integrate; alternatively, we may have been too forgiving in allowing target levels to be affected by job title proliferation and gender imbalance, which are themselves strategies used to maintain segregation. It is for precisely this reason that we adopted a specification of target levels between these extremes. However, we also explored alternative specifications. Minor changes, such as adding controls for occupational composition to the specification, did not

affect our substantive conclusions.²³ An obvious alternative, which is less forgiving, was to define each agency's target as its mean expected segregation level based on our Monte Carlo simulations (see n. 12). This value describes a hypothetical end state, that is, the average amount of job segregation that would be expected, simply owing to chance, given an agency's job structure and staffing pattern. When we used those values as targets in lieu of equation (2), we obtained effects similar to those reported in table 2 but much smaller (virtually none was statistically significant). Most California state government agencies were so far away from this theoretical minimum that there is precious little variation here to explain. Indeed, the median predicted rate of adjustment to these Monte Carlo targets is only .04 and .05 per annum. If a sufficiently strict criterion of integration is employed, then the organizations in our sample are all so far from it that there is little variation in their progress to account for.

We dealt with external labor-supply constraints in one other way. Following Bridges (1982), we calculated an index of dissimilarity for each agency across 99 occupations, dividing it by the amount of segregation expected if the sex ratio in every occupation in the organization were the same as the sex ratio in the same occupation throughout the entire state government labor force (i.e., in all state agencies). This ratio measure thus assesses how segregated each agency is relative to other state agencies employing people in the same occupations. These indices had correlations between .44 and .51 with their unstandardized counterparts used in this study. Moreover, dynamic models applied to these standardized indices generally confirmed our predictions and corroborated the pattern of results in tables 2 and 3 (details available on request). These results suggest that the organizational differences we have documented do not solely reflect differences in external labor-market constraints.²⁴

²³ One reviewer commented that "what should be of interest . . . is how the equilibrium [target] level of segregation depends on agency characteristics, but this is not what is analyzed except for the relation to two variables." We believe that variation across agencies in rates of adjustment is at least as important as variation in target levels, and we have presented supplemental evidence (from our Monte Carlo simulations) to show that most state agencies were considerably more segregated during this period than one would expect simply by chance. We are not principally interested in this paper in modeling equilibrium levels of segregation, but rather in using target levels to control for agency differences in capacities to integrate and then explaining organizational differences in progress toward that end state. Note also that one must rely entirely on the nonlinear character of the partial-adjustment model in order to permit a given variable to affect *both* the target level and the rate of adjustment (see eqq [2]–[4]).

²⁴ In these analyses, there were stronger positive effects of leader turnover and of budgetary dependence on the General Fund and stronger negative effects of having an affirmative action program than in table 2. The effects of unionization and gender

Unravelling the Process of Desegregation: A Detailed Look at Changes in Agency Staffing

The portrait that emerges from our statistical analyses is perhaps best characterized as one of selective adaptation. Notwithstanding the pressure agencies face and the progress some of them have made, most exhibit considerably more segregation than one can attribute either to chance or to labor-supply constraints. What does this imply about the effectiveness of interventions aimed at promoting job integration? To better understand how changes in promotion systems and targeting efforts by central personnel authorities have affected segregation outcomes, we undertook supplementary analyses of changes in specific agencies and job titles, which we very briefly summarize.

How effective are changes to promotion systems aimed at "bridging" clerical jobs to white-collar positions with greater opportunity? The state has restructured its internal labor markets to increase opportunities for women, a strategy often emphasized in discussions of gender integration (e.g., Kanter 1977; Shaeffer and Lynton 1979; O'Farrell and Harlan 1984; Roos and Reskin 1984; DiPrete 1989, chap. 8). In 1977, various civil service bridging jobs were created to link clerical jobs to professional, technical, and lower-level administrative slots by creating positions with lower minimum qualifications but opportunities to gain experience and knowledge required for upper-level white-collar jobs. These new jobs were intended to provide escape routes from dead-end clerical positions. Why, then, were the effects of promotion rates on progress toward integration in table 3 so underwhelming?

To determine whether bridging jobs actually enhanced opportunities for women, we examined individual-level personnel records, 1974–85, for nine small- to medium-sized agencies (see Mittman 1986), which collectively employed about 4,600 people in March 1985. We focused on career transitions involving one particular bridging job—Management Services Technician (MST)—which is a servicewide class and can therefore be analyzed in multiple agencies. The new MST titles led from clerical jobs more directly and naturally to program analyst and related positions, which are at the bottom of each agency's primary executive career ladders.

The new MST positions do appear to have catered to the targeted clerical employees; almost all transitions into those slots came from clerical (or Career Opportunities Development) jobs. Transitions out of MST

and race composition were weakened (but still evident), which suggests that part of their impact on rates of integration is due to their association with labor-supply differences across agencies.

positions also indicate that the bridge class functioned as intended. Of the 84 observed transitions, nine (10.7%) were out of full-time state service, 13.1% into clerical or supervisory clerical positions, and the remaining 76.2% into higher professional or administrative positions. For purposes of comparison, we examined the mobility experiences of women moving through the five jobs that had traditionally been the main clerical "feeder" titles before the new bridge classes were created: clerk, account clerk, accounting technician, office assistant, and office technician. These titles continued to involve restricted promotion prospects for women. Even as late as 1984–85, only 4.7% of all (uncensored) transitions were to bridging titles, 3.8% were to other professional and administrative titles (primarily in data processing), and 11.7% were separations from state service, while the remainder (79.8%) were to other standard clerical jobs.

In sum, these fine-grained results provide greater evidence than our agency-level analyses did of how restructuring internal labor markets can facilitate integration, particularly in settings such as the state civil service, where job assignment and mobility paths are highly formalized and rationalized. However, it appears that these interventions benefited only the specific sets of jobs whose career ladders were restructured rather than "spilling over" to the entire agency.

Does targeting specific job classifications have spillover effects on the rest of the organization? The same conclusion is suggested by an analysis of how targeting has affected agencies. Our statistical analyses revealed somewhat faster integration among agencies reprimanded by the SPB for failing to achieve egalitarian objectives in specific targeted jobs. The SPB intended to bring about greater integration not only in the targeted classes but also elsewhere in the agencies. Were the integration gains achieved in the reprimanded agencies restricted to the targeted jobs, or did the progress generalize to other jobs in those agencies?

The evidence suggests agencies were extremely selective in their adaptation. For each reprimanded agency, we calculated what D would have been before sanctions were imposed (1980–81) had the targeted jobs already reflected their 1985 mix of males and females. This thought experiment reveals that segregation declines in all three reprimanded agencies were due *solely* to changes in the specific targeted jobs. In two of the three agencies, segregation among nontargeted jobs actually *increased* and overall segregation levels would also have increased (in contrast to most other agencies) if hiring quotas had not wrought improvements in targeted positions. Thus, D declined from .946 to .825 between 1980–81 and 1985 in the Forestry Department, but the level would have been even lower (.754) in 1980–81 if the gains from targeting had already been realized. Similarly, D declined from .758 to .697 in the Department of

Parks and Recreation, but would have been slightly lower (.679) in 1980–81 if the effects of targeting had already been evident. (In the third agency, the Department of Fish and Game, there was essentially no change in segregation among nontargeted job titles.)

In sum, SPB reprimands improved specific targeted jobs but had no demonstrable spillover effects throughout the rest of the reprimanded agencies. This apparent ability of agencies to segregate their desegregation efforts might bespeak a conscious effort to subvert the intended aims of targeting. Alternatively, agencies may adapt selectively to environmental changes and pressures in order to avoid "overresponsiveness," which could incapacitate any complex system. This is not to endorse the outcome in this case, but only to offer a possible explanation for it.

DISCUSSION AND IMPLICATIONS

This paper has sought to link workplace inequality to organizational change. From a theoretical and a practical standpoint, organizational practices and policies are crucial determinants of the rate at which ascription in the labor market is reduced. We developed hypotheses about how characteristics of organizations affect the costs and capacities associated with efforts to integrate the workplace by sex, which we tested with data describing California state agencies between 1979 and 1985.

These agencies made substantial progress toward gender equity in job assignment over the six-year period studied. This was the same period when the state government was coming to terms with property tax reform (Proposition 13), which dramatically curtailed government revenues. Thus, the state arguably had less slack with which to pursue egalitarian reforms than during some other periods. Notwithstanding those constraints, progress certainly was made.

Our dynamic analyses highlighted some of the factors that accelerated or retarded that progress. We found that younger and smaller organizations underwent more rapid change than larger, older bureaucracies, which is consistent with theories of organizational ecology. Moreover, we found evidence suggesting that integration may be inhibited by vested interests within organizations. It appeared easier for agencies to equitably assign new entrants than current members. We also observed faster adjustment when staffing activities were overseen by external, centralized personnel authorities than by an in-house affirmative action program, perhaps in part because the latter is more mired in internal politics.

However, according to our sample, it was indeed possible to teach old dogs new tricks. For instance, while desegregation was faster among recently founded organizations than those established in the previous several decades, we also observed rapid integration in some of the oldest

state agencies. We attribute this result to selection forces: organizations that have survived and flourished within the highly political and unstable environment of California state government are likely to be the most adept at reading and responding to environmental changes.²⁵ To do otherwise is to risk extinction.

Desegregation was also facilitated by the presence of key internal and external constituencies seeking change, which is consistent with resource dependence theories. Agencies most vulnerable to pressure from the SPB and the legislature adjusted toward their targets more rapidly, while agencies insulated from such oversight were slower to adjust. Similarly, the presence of a large contingent of women (and, to a lesser extent, of nonwhites) within organizations served as a catalyst for faster change. Our findings are consistent with recent research on other civil service systems, documenting the importance of coalitions inside and outside organizations as determinants of career outcomes, personnel practices, and organizational adaptation (Bridges and Nelson 1989; DiPrete 1989; also see Pfeffer 1989).

Our findings also suggest that characteristics of leaders can affect organizational adaptation. In supplementary analyses, we found some evidence that female leaders facing the same organizational and market constraints as their male counterparts nonetheless apparently pursued egalitarian aims more effectively. Changes in top agency leadership also wrought changes in staffing patterns, which is consistent with previous research showing that executive succession promotes change within governmental bureaucracies (Meyer 1975). In our sample of state agencies, however, executive succession corresponded closely to change in political administrations in 1982–83. Agencies were adjusting toward their integration targets fairly consistently at the time most Brown appointees were replaced (1983 to early 1984), but adjustment rates then declined precipitously during the first year that Deukmejian's selections (disproportionately men) had complete control over budgets (1984–85). In other words, leadership changes associated with the Republican gubernatorial victory in 1982–83 did indeed facilitate organizational change, but not in the predicted direction of *reducing* segregation.

Debates about *whether* organizational leaders and succession make a difference thus seem less fruitful than future research examining the specific circumstances and ways in which they do (Lieberson and O'Connor

²⁵Note that the quadratic effect of age vanishes in table 3 once promotion and growth rates are controlled, which suggests that the youngest and oldest agencies are integrating faster because they are expanding and upgrading their work force faster. This result is consistent with our characterization of the oldest "survivor" agencies as being well adapted (i.e., growing) and meritocratic in personnel administration.

1972; Carroll 1984b). There is evidence in our study of both inertia and adaptation induced by resource dependencies. The issue is not whether organizations adapt, but rather when and why they do. For instance, we did not find much evidence that budgetary sources or the measurability of output affected rates of integration, as suggested by resource dependence and institutionalization perspectives on organizations. But this may merely reflect the specific setting we examined, that is, state government agencies, many of which face a highly politicized and institutionalized environment in which market and technical forces operate only weakly if at all. In that milieu, it may not be surprising to find considerable stability, which is overcome only by strong pressure from state watchdog agencies, vulnerability to scrutiny by the legislature, changes in agency leadership, monitoring of personnel activities by external authorities, and the existence of a sizable constituency of women and non-whites in an agency. Moreover, in large state bureaucracies, the vision and values of leaders have often been rationalized and routinized in standard operating procedures. Once a state bureaucracy has institutionalized an affirmative action program, for example, one would expect some degree of steady progress toward integration, irrespective of who heads the agency. This may explain why the effects of female leadership were relatively weak and why some variables—especially the proportion female—had smaller effects in analyses limited to agencies having affirmative action programs (cf. the “All” and “50+” cols. in table 2).

Thus, future theory and research should examine how an organization's composition, technology, history, structure, and political and resource environments interact to dictate the capacity for change and the relative costs and benefits of change versus stability in a particular setting. Work along these lines would not only help gauge the generalizability of our findings but also help clarify where different perspectives overlap and conflict their predictions about organizational adaptation. For instance, ecological models that stress the benefits of organizations' being able to reproduce themselves resemble institutional arguments claiming that adherence to stable organizational models is beneficial in certain highly institutionalized and regulated environments (Meyer and Scott 1983). Other perspectives point to different organizational attributes that might be expected to increase inertial tendencies. Some economists, for instance, emphasize the “agency” or “influence” costs that arise when actors try to exploit large-scale change efforts for their own ends (e.g., Milgrom and Roberts 1988). Presumably, goal conflict, decentralization, and specialization within key positions or subunits are features of organizations that would raise such costs and thereby promote inertial routines. Cultural arguments instead emphasize the legitimacy of established social

orders, implying that team production, organizational age, the strength of organizational cultures, and the salience of normative control are key factors inhibiting change.

One virtue of the analyses reported in this paper is that they specify the organizational constraints affecting the different integration capacities facing state agencies, as well as the factors differentiating their rates of adjustment toward those targets. As the statistician John Tukey (1977, p. v) once observed, "it is important to understand what you *can* do before you learn to measure how well you seem to have it." Other investigators could use the same type of model to specify targets differently, targets based on other assumptions and values. We think the modeling strategy applied in this paper also holds considerable promise in understanding other facets of the relationship between organizational and career dynamics.

Our analyses may also have policy implications. First, the notion of a target level in our analysis provides a useful way for policymakers, personnel administrators, and courts to specify and measure the capacity of organizations to integrate their job structures. It might also help clarify some of the implicit differences in assumptions among parties interested in labor-market inequality. Second, the felicitous effect of growth on desegregation suggests that recent efforts to "privatize" and "downsize" governmental services are unlikely to facilitate workplace integration. Third, by identifying contexts in which organizational inertia seems most pronounced, our analyses may help decision makers select settings in which to invest scarce resources for enforcement and oversight. Fourth, there were few differences in the general pattern of results in this sample based on the segregation measure employed: *D* versus *H*. (This is, no doubt, due partly to the fact that most state agencies in our sample have a relatively balanced sex ratio overall.) Despite *D*'s potential shortcomings when applied to organizational staffing data, it nonetheless may in some circumstances be a useful and valid social indicator, especially given its relative simplicity, familiarity, and ease of interpretation.

Finally, the limitations of our study underscore promising areas of future research. In some respects, our focus on job integration at the level of state agencies may be both too "macro" and too "micro." Our supplementary analyses of bridging classes and responses to SPB targeting suggested that the effects of external pressures and interventions were by no means uniform throughout organizations. Greater attention to variations within organizations is certainly warranted, especially to the administrative, political, and social influences that have been inferred in our study but not studied directly. At the same time, job integration may be affected by interorganizational linkages that are obscured at the

agency level of analysis. Organizations are frequently interdependent, especially state government agencies, which operate within a common civil service system and political environment. This raises intriguing conceptual and methodological issues concerning how the actions and accomplishments of one organization shape and are shaped by other organizations. Understanding the dynamics of labor markets and careers may involve studying not only organizational dynamics but also the dynamics of interorganizational networks.

REFERENCES

- Aronowitz, Stanley. 1973. *False Promises*. New York: McGraw-Hill.
- Baron, James N., and Andrew E. Newman. 1990. "For What It's Worth: Organizations, Occupations, and the Value of Work Done by Women and Nonwhites." *American Sociological Review* 55:155-75.
- Becker, Gary. 1971. *The Economics of Discrimination*, 2d ed. Chicago: University of Chicago Press.
- Beller, Andrea H. 1984. "Trends in Occupational Segregation by Sex and Race, 1960-1981." Pp. 11-26 in *Sex Segregation in the Workplace*, edited by Barbara F. Reskin. Washington, D.C.: National Academy.
- Bielby, William T., and James N. Baron. 1984. "A Woman's Place Is with Other Women." Pp. 27-55 in *Sex Segregation in the Workplace*, edited by Barbara F. Reskin. Washington, D.C.: National Academy.
- . 1986. "Men and Women at Work: Sex Segregation and Statistical Discrimination." *American Journal of Sociology* 91:759-99.
- Bridges, William P. 1982. "The Sexual Segregation of Occupations: Theories of Labor Stratification in Industry." *American Journal of Sociology* 88:270-95.
- Bridges, William P., and Robert L. Nelson. 1989. "Markets in Hierarchies: Organizational and Market Influences on Gender Inequality in a State Pay System." *American Journal of Sociology* 95:616-58.
- Capell, Elizabeth. 1977. "Constitutional Officers, Agencies, Boards, and Commissions in California State Government, 1849-1975." Institute of Government Studies Research Report no. 81-1. University of California, Berkeley, Institute of Government Studies.
- Carroll, Glenn R. 1984a. "Organizational Ecology." *Annual Review of Sociology* 10:71-93.
- . 1984b. "Dynamics of Publisher Succession in Newspaper Organizations." *Administrative Science Quarterly* 29:93-113.
- Cortese, Charles F., R. Frank Falk, and Jack K. Cohen. 1976. "Further Considerations on the Methodological Analysis of Segregation Indices." *American Sociological Review* 41:630-37.
- DiMaggio, Paul J., and Walter W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48:147-60.
- DiPrete, Thomas A. 1989. *The Bureaucratic Labor Market*. New York: Plenum.
- Dobbin, Frank R., Lauren Edelman, John W. Meyer, W. Richard Scott, and Ann Swidler. 1988. "The Expansion of Due Process in Organizations." Pp. 71-98 in *Institutional Patterns and Organization: Culture and Environment*, edited by Lynne G. Zucker. Cambridge, Mass.: Ballinger.
- Duncan, Otis D., and Beverly Duncan. 1955. "A Methodological Analysis of Segregation Indices." *American Sociological Review* 20:210-17.

- England, Paula. 1981. "Assessing Trends in Occupational Sex Segregation: 1900-1976." Pp. 273-95 in *Sociological Perspectives on Labor Markets*, edited by Ivar Berg. New York: Academic Press.
- Fligstein, Neil. 1985. "The Spread of the Multidivisional Form." *American Sociological Review* 50:377-91.
- Freeman, Richard B. 1981. "Black Economic Progress after 1964: Who Has Gained and Why?" Pp. 247-94 in *Studies in Labor Markets*, edited by Sherwin Rosen. Chicago: University of Chicago Press.
- Granovetter, Mark, and Charles Tilly. 1988. "Inequality and Labor Processes." Pp. 175-221 in *Handbook of Sociology*, edited by Neil J. Smelser. Newbury Park, Calif.: Sage.
- Halaby, Charles N. 1979. "Job-specific Sex Differences in Organizational Reward Attainment: Wage Discrimination vs. Rank Segregation." *Social Forces* 58:108-27.
- Hannan, Michael T., and John H. Freeman. 1984. "Structural Inertia and Organizational Change." *American Sociological Review* 43:143-64.
- Jacobs, Jerry A. 1989. *Revolving Doors: Sex Segregation and Women's Careers*. Stanford, Calif.: Stanford University Press.
- James, David R., and Karl E. Taeuber. 1985. "Measures of Segregation." Pp. 1-32 in *Sociological Methodology*, edited by Nancy Brandon Tuma. San Francisco: Jossey-Bass.
- Kanter, Rosabeth M. 1977. *Men and Women of the Corporation*. New York: Basic.
- Killingsworth, Mark R. 1985. "The Economics of Comparable Worth: Analytical, Empirical, and Policy Questions." Pp. 86-115 in *Comparable Worth: New Directions for Research*, edited by Heidi I. Hartmann. Washington, D.C.: National Academy.
- Konrad, Allison, and Jeffrey Pfeffer. 1991. "Understanding the Hiring of Women and Minorities: How Gender and Ethnic Segregation Is Produced and Reproduced in Organizations." *Sociology of Education* (in press).
- Leonard, Jonathan. 1989. "Women and Affirmative Action." *Journal of Economic Perspectives* 3:61-75.
- Lieberson, Stanley, and James F. O'Connor. 1972. "Leadership and Organizational Performance: A Study of Large Corporations." *American Sociological Review* 37:117-30.
- Malveaux, Julianne. 1985. "The Economic Interests of Black and White Women. Are They Similar?" *Review of Black Political Economy* 14:5-27.
- Maniha, J. K. 1975. "Universalism and Particularism in Bureaucratizing Organizations." *Administrative Science Quarterly* 20:177-90.
- Marshall, Ray. 1974. "The Economics of Racial Discrimination. A Survey." *Journal of Economic Literature* 12:849-71.
- Meyer, John W., and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83:340-63.
- Meyer, John W., and W. Richard Scott. 1983. *Organizational Environments: Ritual and Rationality*. Beverly Hills, Calif.: Sage.
- Meyer, Marshall W. 1975. "Leadership and Organization Structure." *American Journal of Sociology* 81:514-42.
- Meyer, Marshall W., and M. Craig Brown. 1977. "The Process of Bureaucratization." *American Journal of Sociology* 83:364-85.
- Millgrom, Paul, and John Roberts. 1988. "An Economic Approach to Influence Activities in Organizations." *American Journal of Sociology* 94:S154-S179.
- Mittman, Brian S. 1986. "Mobility and Inequality in the Civil Service: Job Ladders and Vacancy Chains in Bureaucratic Labor Markets." Ph.D. dissertation, Stanford University, Graduate School of Business.
- Moe, Terry M. 1987. "An Assessment of the Positive Theory of 'Congressional Dominance.'" *Legislative Studies Quarterly* 12:475-520.

- Northrup, Herbert R., and John A. Larsen. 1979. *The Impact of the AT&T-BEO Consent Decrees*. Philadelphia: University of Pennsylvania, Industrial Research Unit.
- O'Farrell, Brigid, and Susan Harlan. 1984. "Job Integration Strategies: Today's Programs and Tomorrow's Needs." Pp. 267-91 in *Sex Segregation in the Workplace*, edited by Barbara F. Reskin. Washington, D.C.: National Academy.
- Pfeffer, Jeffrey. 1977. "Toward an Examination of Stratification in Organizations." *Administrative Science Quarterly* 22:553-67.
- . 1989. "A Political Perspective on Careers. Interests, Networks, and Environments." Pp. 380-96 in *Handbook of Career Theory*, edited by Michael B. Arthur, Douglas T. Hall, and Barbara S. Lawrence. Cambridge: Cambridge University Press.
- Pfeffer, Jeffrey, and Gerald R. Salancik. 1978. *The External Control of Organizations*. New York: Harper & Row.
- Polachek, Solomon. 1979. "Occupational Segregation among Women: Theory, Evidence, and a Prognosis." Pp. 137-57 in *Women in the Labor Market*, edited by Cynthia B. Lloyd, Emily S. Andrews, and Curtis L. Gilroy. New York: Columbia University Press.
- Reskin, Barbara F. 1988. "Bringing the Men Back In: Sex Differentiation and the Devaluation of Women's Work." *Gender and Society* 2:58-81.
- Roos, Patricia A., and Barbara F. Reskin. 1984. "Institutional Factors Contributing to Sex Segregation in the Workplace." Pp. 235-60 in *Sex Segregation in the Workplace*, edited by Barbara F. Reskin. Washington, D.C.: National Academy.
- Salancik, Gerald R. 1979. "Interorganizational Dependence and Responsiveness to Affirmative Action: The Case of Women and Defense Contractors." *Academy of Management Journal* 22:375-94.
- Schein, Edgar M. 1983. "The Role of the Founder in Creating Organizational Culture." *Organizational Dynamics*, Summer, pp. 13-28.
- Shaffer, Ruth G., and Edith F. Lynton. 1979. *Corporate Experiences in Improving Women's Job Opportunities*. Conference Board Report no. 755. New York: Conference Board.
- Smith, James P., and Finis Welch. 1984. "Affirmative Action and Labor Markets." *Journal of Labor Economics* 2:269-301.
- Stinchcombe, Arthur L. 1965. "Social Structure and Organizations." Pp. 142-93 in *Handbook of Organizations*, edited by James G. March. Chicago: Rand McNally.
- Strang, David. 1987. "The Administrative Transformation of American Education: School District Consolidation, 1938-1980." *Administrative Science Quarterly* 32:352-66.
- Strang, David, and James N. Baron. 1990. "Categorical Imperatives: The Structure of Job Titles in California State Agencies." *American Sociological Review* 55:479-95.
- Strober, Myra H., and Carolyn L. Arnold. 1987. "Integrated Circuits/Segregated Labor: Women in Computer-related Occupations and High-Tech Industries." Pp. 136-82 in *Computer Chips and Paper Chips: Technology and Women's Employment*, edited by Heidi Hartmann. Washington, D.C.: National Academy.
- Theil, Henry, and Anthony J. Finizza. 1971. "A Note on the Measurement of Racial Integration of Schools by Means of Informational Concepts." *Journal of Mathematical Sociology* 1:187-94.
- Tienda, Marta, and Vilma Ortiz. 1987. "Intra-Industry Occupational Recomposition and Gender Inequality in Earnings." Pp. 23-51 in *Ingredients for Women's Employment Policy*, edited by Christine Bose and Glenna Spitze. Albany: State University of New York Press.
- Treiman, Donald J., and Heidi I. Hartmann, eds. 1981. *Women, Work and Wages: Equal Pay for Jobs of Equal Value*. Washington, D.C.: National Academy.

- Tukey, John W. 1977. *Exploratory Data Analysis*. Reading, Mass.: Addison-Wesley.
- Tuma, Nancy B., and Michael T. Hannan. 1984. *Social Dynamics: Models and Methods*. Orlando, Fla.: Academic Press.
- Wharton, Amy, and James N. Baron. 1987. "So Happy Together? The Impact of Gender Segregation on Men at Work." *American Sociological Review* 52:574-87.
- Zoloth, Barbara S. 1976. "Alternative Measures of School Segregation." *Land Economics* 52:278-93.

The Sutherland-Glueck Debate: On the Sociology of Criminological Knowledge¹

John H. Laub
Northeastern University

Robert J. Sampson
University of Illinois at Urbana-Champaign

During the 1930s, Edwin Sutherland established the sociological model of crime as the dominant paradigm in criminology and as a result became the most influential criminologist of the 20th century. This article examines Sutherland's debate with Sheldon Glueck and Eleanor Glueck about the causes of crime and the proper focus of social science research. Previously unavailable correspondence and unpublished papers are examined along with published works from the period (1925–45) when Sutherland was developing the theory of differential association and the Gluecks were launching research on criminal careers. The competing paradigms of the Gluecks and Sutherland are also placed in the socio-intellectual and institutional context in which they worked. It is shown that Sutherland's attack on the Gluecks' interdisciplinary research program was driven by: (a) a substantive version of sociological positivism that attempted to establish criminology as the proper domain of sociology, (b) a commitment to the method of analytic induction, and (c) Sutherland's rise to prominence in sociology. In addition, key aspects of the Gluecks' perspective reflecting their own professional interests in law and psychiatry further contributed to sociologists' hostile reaction. Nevertheless, the article presents evidence that the Gluecks' research on such fundamental issues as age and crime, criminal careers, and social control is more correct than commonly believed and, in fact, occupies center stage in contemporary research.

Edwin Sutherland (1883–1950) has been widely acclaimed as the dominant criminologist of the 20th century. Indeed, *Principles of Criminology*

¹ We are grateful to the members of the Manuscript Division of the Harvard Law School Library for their assistance in the production of this paper. We would also like to thank David Bordua, Jan Gorecki, Michael Gottfredson, Robert Alun Jones, Kenna Davis, Janet Lauritsen, and three anonymous *AJS* reviewers for their helpful com-

([1924] 1978),² *The Professional Thief* (1937a), and *White Collar Crime* (1949, 1983) are classic works still read by students of criminology. It is true as well that most criminologists are familiar with the works of Sutherland's students (e.g., Donald Cressey, Albert Cohen, and Lloyd Ohlin). Moreover, assessments of Sutherland's contributions to criminology are widely available (see, e.g., Cohen, Lindesmith, and Schuessler 1956; Schuessler 1973; and Gaylord and Galliher 1988). The Sutherland legacy in the sociology of crime is thus well established and secure. In fact, as recently as 1979 Gibbons argued that the "evidence is incontrovertible that Edwin Sutherland was the most important contributor to American criminology to have appeared to date." He goes as far as to predict that "it is extremely unlikely that anyone will emerge in future decades to challenge Sutherland's position in the annals of the field" (1979, p. 65). Similarly, Mannheim (1965, p. 470) has suggested that Sutherland receive the equivalent of a Nobel Prize in criminology.

In sharp contrast to the Sutherland legacy stands the work of Sheldon Glueck (1896–1980) and Eleanor Glueck (1898–1972). For over 40 years the Gluecks performed fundamental research in the field of criminology. As shown below, not only did their research provide crucial knowledge on the causes of crime, the Gluecks' research agenda set the stage for battles currently being waged in criminology regarding the proper focus of the discipline and the role of the scientific method. But despite their seminal contributions to the field, the Gluecks' works have been either ignored or criticized—especially by sociologists. As a result, contemporary researchers rarely, if ever, read their original studies. And when perfunctory citations do appear, their purpose is usually to allege fatal flaws in the Gluecks' position. Current debates in criminology have thus emerged as if there were no precedent.

Why have such developments taken place? It is our contention that the accepted fates of Sutherland and the Gluecks are intimately connected and cannot be understood by simple reference to the truth or falsity of their research findings. Instead, the Gluecks' research must be placed in the intellectual and historical context of Sutherland's rise to the position of the dominant sociologist of crime in the 20th century. We argue that

ments on an earlier draft. Requests for reprints should be sent to John H. Laub, College of Criminal Justice, 360 Huntington Avenue., Northeastern University, Boston, Massachusetts 02115.

² The first edition, published in 1924, was entitled *Criminology*. In 1934 the second, revised edition appeared under the title *Principles of Criminology*. Sutherland alone authored a total of four different editions; the fifth edition (1955) was written with the late Donald Cressey, who remained a coauthor through the tenth edition (1978). All 10 editions of the text have been published by J.B. Lippincott.

a shift in Sutherland's disciplinary and methodological outlook resulted in a theory that virtually required him to destroy individual-level, or nonsociological, perspectives on crime. The Gluecks advocated a multiple-factor theory of crime, which to Sutherland represented a threat to the intellectual status of sociological criminology. Hence, Sutherland's attack was aimed largely at extinguishing their interdisciplinary model so that sociology could establish proprietary rights to criminology. Although Sutherland's coup was successful at the time and remains so in some circles today, we demonstrate that in important respects it was unfounded and driven by a distorted version of both sociological positivism *and* the Gluecks' research. At the same time we show how the Gluecks' professional interests contributed to their own demise.

To substantiate our claims we examine in detail a previously unanalyzed debate between Edwin Sutherland and the Gluecks about the causes of crime and proper methods of social science research. After a period of initial harmony in the late 1920s and early 1930s, the Sutherland-Glueck exchange became heated and took on the trappings of an intellectual shoot-out that lasted some 15 years. This is the period when Sutherland was developing his famous theory of differential association and the Gluecks were studying the development of criminal careers and the effectiveness of correctional treatment in reducing criminal behavior. The material we analyze includes both published works and previously unavailable correspondence as well as unpublished papers. We uncovered the correspondence and unpublished manuscripts, along with the original raw data for the Gluecks' studies, in the archives of the Harvard Law School Library. The correspondence, unpublished papers, and raw data provide a unique glimpse into the formation and development of some of the major criminological works of our time. As Schuessler has argued, "Sutherland's contribution to criminology consisted as much in his informal papers and letters as in his published writing" (1973, p. xxiii). We believe the same is true of the Gluecks.

We also place the competing research paradigms of the Gluecks and Sutherland in the socio-intellectual and institutional context in which they found themselves. We argue that the formation and substance of their theoretical positions were deeply affected by their respective methodological and disciplinary biases. To understand the latter, we found it necessary to uncover the contextual factors relating to the intellectual climate and social positions to which each party was witness (see esp. Jones 1977, 1986; Camic 1987; Beirne 1987; Laub 1983).

Finally, we reassess the Gluecks' research findings in light of recent criminological advances and the test of time. In so doing we identify four substantive and methodological characteristics of the Glueck perspective that have captured center stage in current research. These include such

salient issues as age and crime, the value of longitudinal research, criminal careers, and social control theory. We show that, although largely unacknowledged today, the Gluecks' substantive contributions are fundamental to theory and research in the study of crime.

HISTORICAL AND INSTITUTIONAL CONTEXT

The historical context and institutional affiliations of the Gluecks had an important effect on their methodological stance and later dealings with Sutherland in three respects. First, unlike Sutherland's, the Gluecks' educational background was eclectic and interdisciplinary in nature. Sheldon Glueck in particular was something of an academic maverick. He first attended Georgetown University (1914–15) and then transferred to George Washington University where he received his A.B. degree in the humanities in 1920. He went on to receive an LL.B. and LL.M. from National University Law School in 1920. After being denied admission to Harvard Law School, Glueck subsequently entered the Department of Social Ethics at Harvard University, which was an interdisciplinary precursor to the sociology department (see Potts [1965] for a fascinating description of that department). There he received an A.M. in 1922 and Ph.D. in 1924.³ Eleanor Glueck's academic terrain was similarly eclectic—after attending Barnard College (A.B. in English, 1920) and working in a settlement house in Dorchester, Massachusetts, she enrolled in the School of Education at Harvard and took an Ed.M. degree in 1923 and a doctorate (Ed.D.) in 1925.⁴ (Both Sheldon and Eleanor Glueck were also given honorary doctorates by Harvard University in 1958.) As a team the Gluecks were thus not beholden to any one discipline in an “a priori” sense, and, as a result, they published extensively in the leading journals of criminology, social work, psychology, sociology, education, law, and psychiatry.⁵ As will become more apparent below, the price they paid for such an interdisciplinary outlook was steep. Indeed, as Geis recognized over 20 years ago, “the Gluecks belong to no single academic discipline, and they are suffering the *déclasse* fate of aliens and intruders” (1966, p. 188).

Second, the Gluecks' social positions within the academic community

³ Sheldon Glueck's (1925) Ph.D. thesis crosscut the interests of sociology, law, and psychiatry, focusing on criminal responsibility, mental disorder, and criminal law.

⁴ Eleanor Glueck's early research focused on the sociology of education (community and schools) and the evaluation of research methods in social work (1927, 1936; see also Gilboy 1936 and Vaillant 1980).

⁵ A bibliography of the Gluecks' works from 1923 to 1963 is published in Glueck and Glueck (1964).

were unique at the time and would be even today. After teaching a few years in the Department of Social Ethics at Harvard, Sheldon Glueck was appointed to the Harvard Law School as assistant professor of criminology in 1929. He became a full professor in 1931 and was appointed the first Roscoe Pound Professor of Law in 1950 (*Current Biography Yearbook* 1957). Sheldon Glueck's position as a professor of criminology in a law school was an unusual institutional arrangement that led him to a somewhat isolated and "outcast" perspective. Specifically, although law professors and students do not often conduct (or reward) social science research, that was his specialty and main interest. Moreover, research on the causes of crime was a particular anomaly in the law school setting, though it should be noted that during the 1930s the Harvard Law School had a tradition of research on the administration of justice (e.g., the Cleveland Crime Survey and the Harvard Crime Survey). Sheldon Glueck's institutional arrangement was a structural constraint in yet another crucial respect—there was no opportunity to train Ph.D. students who might carry on the Gluecks' research agenda.⁶

Perhaps more salient was the institutional treatment accorded Eleanor Glueck. Although armed with a doctorate in education and a prolific publishing record,⁷ Eleanor Glueck was unable to secure a tenured faculty position or any teaching position at Harvard. In fact, she was employed from 1930 to 1953 as a research assistant in criminology at the Harvard Law School.⁸ Some 20 years after her appointment as a research assistant she was "promoted" to research associate in criminology in 1953, a position she retained until 1964. At the same time, from 1929 to 1964, she was codirector of the project on the causes and prevention of juvenile delinquency.⁹ In short, Eleanor Glueck's entire career at Harvard University consisted of a social position akin to what many Ph.D. candidates face today *before* graduation. As such, she was an outcast from mainstream academia at Harvard.

The third fact central to understanding the Gluecks' approach was

⁶ The contrast to the structural arrangement of Edwin Sutherland with regard to graduate students is important and is addressed further below.

⁷ Eleanor Glueck received her doctorate in educational sociology at the Harvard Graduate School of Education, the only school at Harvard at that time that admitted women.

⁸ Harvard Law School did not admit women as students until 1950; it was the last Ivy League school to do so. Even then, it has been noted that during the 1950s and 1960s women at Harvard Law School were "treated like members of an alien species" (Abramson and Franklin 1986, p. 10).

⁹ Although the Gluecks' research was carried out under the auspices of the Harvard Law School, their research was funded by numerous private foundations. Eleanor Glueck spent an enormous amount of time on this fund-raising activity.

that their intellectual mentors were a diverse group drawn from a variety of disciplines and all unusual thinkers in their own right. The group included such figures as Roscoe Pound, Felix Frankfurter, Richard Cabot, Bernard Glueck, William Healy, Augusta Bronner, and Edwin B. Wilson. This diversity of intellectual influence is evident throughout the Gluecks' research careers. Early on, the Gluecks were influenced personally as well as professionally by Sheldon Glueck's older brother, Bernard Glueck. The latter was a forensic psychiatrist at Sing Sing Prison and had a long-standing interest in crime (see B. Glueck 1916, 1918). Perhaps equally important, it was Bernard Glueck who arranged the first meeting between one of his graduate students, Eleanor Touroff, and Sheldon Glueck.

At Harvard the Gluecks were influenced by Richard C. Cabot, a professor in the Department of Social Ethics. It was in a seminar with Professor Cabot that the idea for a study of 500 offenders from the Massachusetts Reformatory first originated. Cabot's own research utilized the follow-up method in assessing the accuracy of diagnoses of cardiac illnesses (see Cabot 1926). Sheldon Glueck noted that in the field of penology no studies had been done assessing the posttreatment histories of former prisoners. Excited by the prospects of such research, Cabot arranged financing for the Gluecks' research, which culminated in *500 Criminal Careers* (1930).

Felix Frankfurter served as director of the Harvard Crime Survey in 1926 and was also quite influential in the Gluecks' early studies. In fact, the Harvard Crime Survey, of which *One Thousand Juvenile Delinquents* (1934a) is volume 1 in a series of reports, can be seen as an early model of scientific inquiry in the social sciences. According to Frankfurter, the survey was "not an agency for reform" but a contribution of scientific knowledge to society in the areas of criminal behavior and social policy that "heretofore had been left largely to improvisation, crude empiricism, and propaganda" (1934, p. xii). Moreover, Frankfurter (1934) believed that the formulation of the problem and use of the scientific process to address the problem would eventually lead to prudent social policies. This general perspective can be found in all the Gluecks' research.

William Healy and Augusta Bronner probably wielded the most influence in the Gluecks' intellectual history. The Gluecks had met Healy and Bronner, who were the directors of the Judge Baker Foundation, when they first arrived in Boston, a meeting facilitated in part by Bernard Glueck. The Gluecks had read Healy's *The Individual Delinquent* (1915) and were favorably disposed to his research. At the same time, Healy was interested in issues relating to Sheldon Glueck's doctoral thesis and was one of the reviewers who encouraged its publication by Little, Brown

(S. Glueck 1964, p. 319). Most important to the Gluecks was the "scientific attitude" of Healy and Bronner and, in a memorial address for Healy, Sheldon Glueck stated that he was "a major catalyst of our work" (1964, p. 319). Like the Gluecks, Healy focused on the individual as the most important unit of analysis, embraced a multiple-factor approach in the study of crime causation, and utilized knowledge across a variety of disciplines (see Healy 1915; and Healy and Bronner 1926). In fact, Snodgrass (1972, p. 326) has referred to *Unraveling Juvenile Delinquency* (Glueck and Glueck 1950a) as "essentially a modernized *Individual Delinquent*."

In short, three factors worked together to develop a fiercely independent, interdisciplinary, and even iconoclastic outlook on the part of the Gluecks. In particular, interdisciplinary educational training, coupled with Sheldon Glueck's unusual position in the law school and apparent gender discrimination against Eleanor Glueck, served to create almost a bunker mentality on the part of the Gluecks, especially regarding Harvard sociology.¹⁰ The Gluecks were also constrained by their lack of involvement in the training of graduate students. Added to this was the intellectual diversity of a set of colleagues who fostered empirical research beyond the confines of any one discipline. It is only within this context that we can now understand the Gluecks' theoretical and methodological perspective.

The Glueck Perspective

During their 40-year career at the Harvard Law School, the Gluecks produced four major data bases relating to crime and delinquency. The first was the study of 510 male offenders from the Massachusetts Reformatory during the period 1911–22. These offenders were studied over a 15-year span, which resulted in three books (Glueck and Glueck 1930, 1937a, 1943). A second although similar study of women incarcerated at the Women's Reformatory resulted in the publication of *Five Hundred Delinquent Women* (1934b). A third major research effort focused on a sample of juveniles who had been referred by the Boston juvenile court

¹⁰ Harvard sociology in the 1930s has been described as "intellectually ill-defined" (Camic 1987, p. 425). The powers that did exist (e.g., Sorokin, Parsons, and Homans) certainly did not consider the study of crime to be central to the mission of sociology (see Faculty Committee Report 1954, and Cohen's interview in Laub [1983]). In fact, the parallel between Parsons's pursuit of general sociological theory at Harvard (see Camic 1987) and Sutherland's at Indiana is striking. It should also be noted that both Sheldon and Eleanor Glueck were Jewish. One can speculate that discrimination against Jews at Harvard University (see Laub 1983, p. 185) may have also contributed to isolating the Gluecks from the mainstream academic community.

to the Judge Baker Foundation (the existing court clinic at the time). These results were published in *One Thousand Juvenile Delinquents* (1943a), and a follow-up analysis 10 years later produced *Juvenile Delinquents Grown Up* (1940). The results of these studies are summarized in a volume entitled *After-Conduct of Discharged Offenders* (1945). Finally, the work the Gluecks are best known for is *Unraveling Juvenile Delinquency* (1950a). This major study of the formation and development of criminal careers was initiated in the 1940s and involved a sample of 500 delinquents and 500 nondelinquents matched case-by-case on age, race/ethnicity, general intelligence, and low-income residence—all classic criminological variables thought to influence both delinquency and official reaction. Over a 17-year period the Gluecks conducted an extensive follow-up of the original *Unraveling* sample, which resulted in the publication of *Delinquents and Nondelinquents in Perspective* (1968; see also Glueck and Glueck 1970).

The Gluecks' methodological approach to the study of crime can be characterized by three distinct features. The first is an emphasis on longitudinal and follow-up prediction studies, including, when possible, control groups for comparative purposes. Second, the Gluecks' work emphasized a criminal career focus, especially the study of serious persistent offenders (1950a, p. 13). Related to this was the Gluecks' thought that the study of the formation, development, and termination of criminal careers was an important research priority, and that the causes of the initiation of crime were distinct from the causes of continuing crime and processes of desistance (Glueck and Glueck 1930, p. 257; 1934b, p. 282; 1945, p. 75, n. 1). Third, the Gluecks stressed the importance of collecting multiple sources of information (e.g., parent, teacher, self-report) in addition to official records of delinquency.

As for substantive findings, the Gluecks, like Goring ([1913] 1972), uncovered the important relationship between age and criminality. They argued that age of onset was a key factor in terms of etiology and policy and that career criminals started very young in life. The Gluecks also stressed that crime declined substantially with age. Specifically, in all of their research the Gluecks found that, as the population of offenders aged, their crime rate declined. Furthermore, even among those who continued offending, the seriousness of the offenses declined (Glueck and Glueck 1940, 1943, 1945, 1968). The Gluecks sought to understand the age-crime curve in terms of maturational reform. As we will see, not only was the relationship between age and crime one of the major sources of their battle with Sutherland, it foreshadowed a contemporary debate along similar lines.

Research by the Gluecks also revealed the stability of delinquent patterns over the life cycle. They argued that the data showed "beyond a

reasonable doubt that, in all of life's activities considered in this inquiry, the men who as boys comprised our sample of juvenile delinquents have continued on a path markedly *divergent* from those who as juveniles had been included in the control group of nondelinquents" (Glueck and Glueck 1968, pp. 169–70). The Gluecks' hypothesis regarding the stability of deviance would also turn out to be a major sticking point with those advocating a sociological perspective.

According to the Gluecks, the most important factor that distinguished delinquents from nondelinquents in early life was the *family*. In particular, the Gluecks (1950a) developed a prediction scale of delinquency that centered on family variables—disciplinary practices, supervision by parents, and child-parent attachment. Those families with lax discipline combined with erratic and threatening punishment, poor supervision, and weak emotional ties between parent and child were found to generate the highest probability of delinquency. Although a focus on the family was to become extremely unpopular in sociology during the 1950s and 1960s, it was one of the Gluecks' major interests.

Perhaps most important, the Gluecks promoted a multidisciplinary perspective and had little patience for those criminologists who were wedded to any one particular discipline. As a result the Gluecks rejected unilateral causation whether sociological, biological, or psychological in focus and embraced instead a multiple causal approach that emphasized differentiation between offenders and nonoffenders. This approach is seen most clearly in *Unraveling*, in which they focused not only on the family, but on school, opportunities (peers and use of leisure time), formal sanctions (e.g., arrest, probation, prison), personality development, temperament, and constitutional factors such as body structure (e.g., mesomorphy). As they stated, "The separate findings, independently gathered, integrate into a dynamic pattern which is neither exclusively biologic nor exclusively socio-cultural, but which derives from an interplay of somatic, temperamental, intellectual, and socio-cultural forces" (1950a, p. 281). The Gluecks, along with Healy (1915; see also Healy and Bronner 1926), thus established the multiple-factor approach to the study of crime.

Overall, the Gluecks were stubbornly driven by what their data revealed and refused to pigeonhole their interpretations into any one disciplinary box, tempted though they were. This emphasis on fact gathering prevented them from ever developing a systematic theoretical framework. As they argued, "Neither 'hunches' nor theoretical speculations, can conjure away the facts, even though those facts may not fit neatly into various preconceptions about human nature and crime causation" (1951, p. 762). Their mode of analysis was thus to cross-tabulate all possible factors with delinquency (cf. Lazarsfeld 1955). As a result, *Un-*

raveling is very difficult to read and seems to present nothing but table after table. As Geis has noted, "The paradox of studies by the Gluecks: they do such good work so badly" (1970, p. 118; see also Laub and Sampson [1988] for a review of the methodological criticisms of *Unraveling*).

We will return later to the validity of the Gluecks' major research findings regarding such issues as age and crime, family processes, and the stability of crime and deviance across the life course. For now, we hope to have established the basic Glueck perspective and placed it in the historical and institutional context specified above. In similar fashion we turn our attention next to the Gluecks' major contemporary and critic.

The Initial Sutherland Perspective

In 1924 Edwin Sutherland published the first edition of the now-classic *Principles of Criminology*.¹¹ At the time Sutherland was an untenured assistant professor of sociology at the University of Illinois in Urbana. His education was also in sociology—receiving a Ph.D. from the University of Chicago in 1913. It may thus come as a surprise to learn of Sutherland's original position on the causes of crime. This is easy to miss, for criminologists today cite the later editions of *Principles* (see n. 2 above), in which the theory of differential association is laid out. But this strategy fails to reveal the magnitude of Sutherland's shift in thinking. The shift, ironically enough, was to come from a multiple-factor approach clearly stated in the first 1924 edition.

Although commonly viewed as a macrosociologist of cultural conflict (see, e.g., Kornhauser 1978), in 1924 Sutherland began by specifying what he considered to be the proper unit of analysis in criminology—the individual. As he noted, "knowledge can be secured best by the individual case study." He also argued for the comparison of "criminal and noncriminal populations" (1924, p. 86). Moreover, in an intriguing section of *Principles* entitled "Plan for Study of Causes of Crime," Sutherland outlines the "ideal" data-collection strategy in criminology. This would include "detailed records of the development of personalities," which "need to be very detailed and pursued from early infancy to old age" (1924, pp. 86–87). This strategy would also extend to "mental and

¹¹ It should be pointed out that, according to Gaylord and Galliher (1988), writing this text marked the beginning of Sutherland's career in criminology. His Ph.D. thesis focused on "Unemployment and Public Employment Agencies" and his overall substantive interests at the time seemed to be in areas of political economy and political science (Lindesmith 1988, p. xi).

educational tests," as well as interviews with parents, teachers, and a full recording of all "conduct disorders." It is interesting that this is exactly the sort of methodological strategy followed by the Gluecks.

Sutherland was later to become vehemently antipsychiatry, but there was little evidence of this stance in his early writings on the substantive predictors of crime. For example, he noted the association between psychopathic personality and criminality and, in fact, argued that "there is good reason to believe that the psychopathic personalities, and especially those of the egocentric type, will get into difficulty with other people more frequently than the average individual" (1924, p. 123). Sutherland, like the Gluecks, also maintained that the family was a crucial variable in understanding delinquency: "Those homes with extremely rigid discipline, extremely lax discipline, or inconsistent discipline are developing many children with personalities that are socially undesirable and incline toward delinquency" (1924, p. 147). And, perhaps most ironic, Sutherland acknowledged openly the potential effects of biology on delinquency, noting possible mediating effects of social factors (1924, p. 180). Much like the Gluecks would later argue, Sutherland wrote that "it is not the physical defect itself that produces delinquency, but the social and other conditions surrounding the defective person" (1924, p. 180). In the 1920s Sutherland was thus a multiple-factor theorist. He in fact admitted as much, stating later in an address to the Ohio Valley Sociological Association, "I had a congeries of discrete and co-ordinate factors, unrelated to each other, which may be called multiple-factor theory" (in Schuessler 1973, p. 14).

Sutherland's favorable inclination toward the multiple-factor perspective also extended to his early communication with the Gluecks. The early correspondence between the Gluecks and Sutherland covered the period from February 26, 1929, to May 15, 1936. There are more than 40 pieces of correspondence over this time period.¹² Our inspection of the full body of materials reveals a cordial relationship between professional colleagues. The topics of discussion included parole prediction and the role of mental defects and crime, among others. They also shared ideas and factual information. What is most noteworthy though is Sutherland's strong praise for the Gluecks' work. For instance, in response to the forthcoming publication of *500 Criminal Careers*, Sutherland wrote, in a letter dated September 27, 1929, that the book was "a very great contribution to the literature and methods of criminology" (Sutherland 1929). In the same letter Sutherland did raise some points of "minor

¹² This correspondence can be found in the Eleanor T. and Sheldon Glueck Joint Papers and the Sheldon Glueck Papers, Harvard Law School Library, Cambridge, Mass.

importance" with regard to statistical computations and the Gluecks' interpretation of research on parole prediction with respect to weighting factors. Overall, however, the tone of the letters was upbeat, and, as late as a May 4, 1936, letter, Sutherland praised the Gluecks and expressed "astonishment" at their publication record (Sutherland 1936).

The Gluecks in turn praised Sutherland's work. For instance, in *500 Criminal Careers* (1930), the Gluecks discussed problems in major textbooks in the field with regard to assessment of recidivism rates. However, the Gluecks (1930, p. 7) noted that "E. H. Sutherland, in *Criminology*, does not fall into this fallacy of careless generalization in the direction of optimism." Similarly, with regard to Sutherland's second edition of *Principles of Criminology*, Sheldon Glueck's correspondence with Sutherland's publisher (J. B. Lippincott) stated that the text was "unquestionably the most satisfactory" on the subject and that Sutherland wrote with "objectivity," "temperateness," and "rational eclecticism" (S. Glueck 1934).

SHIFTING TIDES: THE SUTHERLAND-GLUECK DEBATE

Beginning in 1937, Sutherland began to shift his thinking and, as a consequence, his attitude toward the Gluecks' research. The buildup was slow at first and began with a review by Sutherland (1937*b*) of the Gluecks' *Later Criminal Careers*. The *Later Criminal Careers* (Glueck and Glueck 1937*a*) study was the second in a series focusing on 510 offenders released from the Massachusetts Reformatory. This particular book described the second five-year follow-up period after parole (1928–32). Sutherland's attention was centered largely on the two major conclusions of the study. First, improvement in behavior over time was attributed by the Gluecks "primarily to aging or maturation." And second, the major obstacle to reform through maturation was argued to be psychological dysfunction. Sutherland also critiqued almost every methodological aspect of the study, claiming, in a two-page review, that the information gathered was "scanty," that few of the offenders were "observed" firsthand, and that "the purpose of these studies has not been defined" (1937*b*, p. 185). His comments are interesting because an earlier study by the Gluecks (1930), identical in nature, had been praised by Sutherland (1934*b*, pp. 511, 546–47).

As to the substance of the findings, Sutherland strongly attacked the conclusion that "the reduction of delinquency was due to aging or maturation" (1937*b*, p. 185). He unambiguously stated that "there is no justification for this conclusion, either in statistics or logic. Aging, as the mere passing of time, has no significance as a cause" (1937*b*, p. 185). But Sutherland was even more perturbed by the Gluecks' psychologically

oriented conclusion that mental and/or emotional difficulties impeded the process of reformation among former prisoners. Although as shown above he once agreed with this position, Sutherland argued that "this is the least satisfactory part of the book." He goes on to maintain in a few short sentences, and without documentation, that the psychiatrist at the institution (who made the evaluations *before* the follow-up when postrelease behavior was measured) had "a heavy case load and little time for careful examinations, and also had a general bias toward interpretation of delinquency as due to mental pathology" (1937*b*, p. 186). Ignoring the crucial fact that the classifications had predictive validity (Glueck and Glueck 1937*a*, pp. 127, 198–212), Sutherland dismissed the results ("no confidence can be placed in this") and the overall conclusions of the book, which he claimed "are doubtful" (1937*b*, p. 186).¹³

Despite its largely negative tone, Sutherland's review in the influential *Harvard Law Review* was only the tip of the iceberg. Sutherland's review was in fact culled from a longer, unpublished manuscript entitled "The Gluecks' *Later Criminal Careers*: An Appraisal by Edwin H. Sutherland" (1937*c*). This original paper was 18 pages in length and was circulated among criminologists, including the Gluecks. The paper was read at the annual meeting of the Sociological Research Association on December 30, 1937, in Atlantic City.¹⁴ An edited version was later published after Sutherland's death in *The Sutherland Papers* (Cohen et al. 1956, pp. 291–307). In the original piece, located in the Gluecks' archive at Harvard University, Sutherland critiqued in a forceful tone the Gluecks' conclusions regarding aging and maturational reform. He also began to express new views that foreshadowed his conversion to analytic induction (described in more detail below) as a methodological tool. With regard to the association between age and crime he wrote, "There is no statistical procedure by which a statistically significant association can be translated into a cause. . . . Moreover, the passing of time no more explains reformation than it explains the genesis of a depression or the election of an old man to the Senate" (1937*c*, p. 12).

¹³ For a published point-by-point response to the Sutherland review by a colleague of the Gluecks' from the Harvard Law School, see Hall (1937, pp. 389–93).

¹⁴ According to correspondence from Sutherland to Eleanor Glueck on January 11, 1938, the session was chaired by Ernest Burgess and was devoted to a discussion of *Later Criminal Careers* based on papers by Sutherland and C. E. Gehlke. Sutherland wrote, "I read the principal parts of your paper to the group, reading at least two-thirds of it" (1938). This statement was in response to a request in a letter to Sutherland from the Gluecks dated December 14, 1937: "If you plan to present your paper in its original form, we are sure you will do us the courtesy of having our reply read at the same meeting" (Glueck and Glueck 1937*c*). Whether the Gluecks actually expected Sutherland himself to read their reply to his critique of their book at a meeting organized to discuss their book is, to say the least, unclear.

More generally, Sutherland expressed his distaste for the factual search for the correlates of delinquency in a longitudinal perspective. He argued that it was of utmost importance that researchers first present a thesis and then attempt to test it. Noting his disregard of the search for key facts, Sutherland followed up his unpublished critique with a letter, dated December 4, 1937. Sutherland wrote to Sheldon Glueck about *Later Criminal Careers*, "You would have been much safer if you had presented your factual data without the thread of theory, but in my opinion research work of that factual nature are safe but useless. Every research study should, I believe, be organized around general propositions or general theory, and unless it can be so organized it is relatively futile" (1937d).

It is interesting that this passage reveals that Sutherland recognized the Gluecks were not sheer empiricists. Indeed, in his longer review he refers to the Gluecks' "theory of criminal behavior" and that they "fail to prove their hypotheses" (1937c, p. 17). In any case, Sutherland castigated the collection of empirical data without theory, yet at the same time rejected the Gluecks' substantive framework on age and crime and maturational reform. Paradoxically, in fact, he accused the Gluecks of trying to prove a preconceived theory of persistent criminality (1937c, pp. 3-4).

The Gluecks were sufficiently concerned with Sutherland's critique that they responded (Glueck and Glueck 1937b) with a 25-page document that, to our knowledge, was never published. This response was titled "Analysis of Prof. Sutherland's Appraisal of *Later Criminal Careers*" and is dated December 13, 1937. It is surprising that the correspondence shows that some portion of the Gluecks' rejoinder was read by Sutherland himself at the 1937 meeting of the Sociological Research Association (see n. 14 above). In the response the Gluecks countered that they were not trying to prove any preconceived theories regarding age and crime: "We have no criminologic axes to grind. We search for facts as accurately as possible and on the basis of the findings we arrive inductively, and not *a priori*, at certain conclusions. The statement from *Later Criminal Careers* that you quote on pages 3 and 4 [of the unpublished critique] is not a preconception with which we started our work; it is a theory suggested by the evidence emerging from the facts" (1937b, p. 3). In the full response they also answered, point by point, Sutherland's "minor" criticisms regarding the number of cases followed up as well as other issues.¹⁵

¹⁵ It is rather ironic to note that in the same year Sutherland was criticizing the Gluecks for their small sample size ($N = 454$), he published *The Professional Thief* (1937a), a case study of one. More generally, Sutherland conducted little, if any,

They expressed more puzzlement, however, at Sutherland's views on methodology. In the Lazarsfeld tradition, the Gluecks tried to establish an age-crime relationship by ruling out (controlling for) other factors associated with age. Although admittedly crude by today's standards, the Gluecks' analysis was straightforward—after they had analyzed several competing variables, age and also psychological adjustment seemed to best predict desistance from crime. Their response to Sutherland reflects the Gluecks' general empirical stance:

Your statement (page 12) that "there is no statistical procedure by which a statistically significant association can be translated into a cause" is a well known truism in a sense; but the illustration you give [age cannot explain the election of an old man to senate] is obviously absurd and is assuredly not analogous to the association of aging with behavior. While it is true that the mere association of two factors does not necessarily mean that one is causal of the other, it is also true that in every field of science an association between factors that ought, in reason and experience, to be related does give the basis of a valid inference as to causation. . . . If one could not ever make such an inference from statistical associations, it is hard to see how any science would be possible. [1937*b*, pp. 12–13]

They went on in great detail to argue that the age and psychological relationships with crime were robust and met the conventional methodological standards of the time.

One is thus led to wonder, as the Gluecks probably did, what exactly was responsible for Sutherland's newfound rejection of their work. We believe the answer lies in the confluence of three important factors relating to the changing socio-intellectual context of the late 1930s—(a) analytical induction, (b) sociological positivism, and (c) the rising social position of Sutherland in the sociological profession.

Analytic Induction

According to Alfred Lindesmith, a colleague and close friend of Sutherland, subsequent editions of Sutherland's criminology text (in 1934, 1939, and 1947) sought to "improve and correct the multiple factor theory represented by the 1924 edition" (Lindesmith 1988, p. xi). Specifically, the 1939 and 1947 editions were "designed to substitute . . . differential association theory for that of multiple factors. . . . During this same period Sutherland's reputation soared, and his criminological textbook

original empirical research on juvenile delinquency. Although presumably not intentional, this insulated his work from the sort of methodological criticisms aimed at the Gluecks.

has dominated the field for more than half a century" (Lindesmith 1988, p. xi).

A number of factors have been alluded to as being important in this transformation (see Schuessler 1973, pp. 13–29; Gaylord and Galliher 1988, chaps. 5 and 6). These include the publication of the Michael-Adler report (1933), which highly criticized existing criminological research; a meeting chaired by Dean Beardsley Rummler of the University of Chicago on the state of criminological knowledge, at which Sutherland could not state any positive generalizations about the causes of crime; Sutherland's work on *The Professional Thief* (1937a); the influence on Sutherland's thinking of the work of Charles H. Cooley relating to social processes; the development of analytic induction by Alfred Lindesmith; Sutherland's collaboration with Thorsten Sellin for the Social Science Research Council and the subsequent publication by Sellin of *Culture Conflict and Crime* (1938); and finally, his colleagues at the University of Chicago and Indiana University.

Of these factors the most crucial from our perspective was the development of analytic induction by Alfred Lindesmith, a former student of Sutherland's at the University of Chicago. Lindesmith joined the Sociology Department at Indiana University in 1936 and became known for his research on drug addiction (Lindesmith 1947) and his new method of scientific inquiry. Sutherland succinctly noted the influence of Lindesmith and his methodological outlook.

When Lindesmith came to Indiana University . . . I became acquainted with his conception of methodology as developed in his study of drug addiction. According to this conception, an hypothesis should fit every case in the defined universe, and the procedure to use is: State the hypothesis and try it out on one case; if it does not fit the facts, modify the hypothesis or else redefine the universe to which it applies, and try it on another case, and so on for case after case. The methodology consists in searching for negative cases, one negative case disproving the hypothesis. Although this involves several cases, it is not concerned with averages, standard deviations, or coefficients of correlation. The methodology assisted me greatly in formulating problems and in testing hypotheses. [In Schuessler 1973, pp. 17, 18]

According to Gaylord and Galliher (1988), Sutherland had reached a theoretical impasse in the early 1930s—he was unable to make sense of multiple causes or factors and multiple-factor theory. Analytic induction provided Sutherland with a methodology that he believed allowed the development of a universal generalization that would explain *all* criminal behavior (Sutherland and Cressey 1955, pp. 68–69; see also Turner 1953). Specifically, this method led Sutherland to extract common elements and organize the heretofore diverse set of facts that criminological research

had generated into the single theoretical abstraction of "differential association" (Gaylord and Galliher 1988, p. 116; Matsueda 1988, pp. 277-80).¹⁶

Moreover, by embracing analytic induction as *the* scientific method, Sutherland's development of a general theory of crime causation included a rejection of multiple-factor theory as, among other things, unscientific. As a result the Gluecks' methodology as well as their substantive interest in multiple factors of crime causation were dismissed by the new Sutherland perspective. This conversion is clearly seen in the 1947 edition of *Principles of Criminology*, in which Sutherland argued (p. 3) that "any scientific explanation consists of a description of the conditions which are always present when a phenomenon occurs and which are never present when the phenomenon does not occur."¹⁷

One can argue that Sutherland had adopted what Hirschi and Selvin (1970) have termed "the false criteria of causality." In large measure, Sutherland's critique of multiple-factor approaches generally, and the Gluecks' research specifically, rests on "false criterion 1." "Insofar as a relation between two variables is not perfect, the variable is not causal" (1970, p. 129). The implication of this point is striking. "Perfect association implies single causation, and less-than-perfect association implies multiple causation. Rejecting as causes of delinquency those variables whose association with delinquency is less than perfect thus implies rejecting the principle of multiple causation" (Hirschi and Selvin 1970, p. 130). As they argued, this criterion of noncausality is inappropriate.¹⁸ In a somewhat different vein, Turner (1953) argues that studies using analytic induction fail to provide empirical prediction.

¹⁶ According to Sutherland, criminal behavior, like noncriminal behavior, is learned in interaction with other people: "A person becomes delinquent because of an excess of definitions favorable to violation of law over definitions unfavorable to violation of law" (Sutherland and Cressey 1955, p. 78). Sutherland also strongly emphasized culture in his analysis of crime, arguing that society consisted of a number of diverse groups with varied cultures. Underlying the phenomenon of criminal behavior is the principle of culture conflict, which leads to differential association, which in turn leads to criminal behavior (see also Matsueda 1988). Sutherland eventually developed nine propositions of differential association (see Sutherland and Cressey 1955, pp. 77-79).

¹⁷ During the 1950s Albert Cohen, a student of Sutherland, also wrote a sharp critique of multiple-factor theory (Cohen 1970). See Hirschi and Selvin (1970) and Hirschi (1973) for a response to Cohen's critique.

¹⁸ Hirschi and Selvin (1970, p. 130) note that precedent for demanding the "perfect criterion of causality" can be found in Michael and Adler's (1933) critique of criminological research. This report was influential in shaping Sutherland's thinking about criminological theory and research (Gaylord and Galliher 1988).

With respect to the notion of cause, the Gluecks "recognized that certain influences may be regarded as causal in a statistical sense of high probability" (Glueck and Glueck 1974, p. 44; 1952, pp. 164–69) and thus followed a widely accepted probabilistic model of social science methodology—that is, association, causal order, and lack of spuriousness (see Hirschi and Selvin 1967). (For an illustration of their use of cause see *Unraveling* [1950a, pp. 281–82].) In sharp contrast, Geis and Goff have noted that "it was one of Sutherland's favorite statements that '85 percent of anything could not be a cause. It had to be 100 percent or it was not a theory.' Indeed, if poverty didn't *always* cause crime, then poverty couldn't qualify as part of a theoretical causal statement" (1986, p. 9).

It is difficult to overestimate the significance of Sutherland's scientific view for the field of criminology. As Hirschi has highlighted, "Perhaps the outstanding event in the intellectual history of theories of cultural deviance was not a decision about the nature of man, but a rather ordinary appearing decision [by Sutherland] about the nature of scientific explanation: 'I reached the general conclusion that a concrete condition cannot be a cause of crime, and that the only way to get a causal explanation of criminal behavior is by abstracting from the varying concrete conditions things which are universally associated with crime.' Sutherland decided that every case of crime should be explained by the theory he proposed to construct" (1969, pp. 13–14). As Hirschi points out, Sutherland's view that "only concepts can be causes leads to misinterpretation of empirical results and ultimately to the view that the quest for causes is futile" (1969, p. 13, n. 38; see also Hirschi and Selvin 1967, pp. 130–33, 177–83). Although some readers will certainly disagree with the Hirschi-Selvin position on criteria of causal research, it is nonetheless the case that virtually no empirical research today in criminology is guided by analytic induction.

Sociological Positivism

A second, and equally important, factor in explaining Sutherland's changing conception of theory was his use of a particular form of sociological positivism. Traditionally, when social scientists think about positivism there is a tendency to focus on issues of cause and effect, empirical data, replication, and public statement of research methods. In this sense positivism does not fix the concepts to be used in explanations of phenomena, and it guarantees success to none of its constituent disciplines (Gottfredson and Hirschi 1990, p. 49). However, Gottfredson and Hirschi go on to argue that positivism as practiced in the 20th century has actually

been used as a *substantive* perspective as well as a method of knowing. Specifically, the major error of modern positivism has been the "tendency to confuse the interests of one's discipline with the interests of scientific explanation" (1990, p. 73). In the study of crime, for example, they are able to document the proprietary interests of biology in heritability, psychology in personality, and sociology in social class (Gottfredson and Hirschi 1990, chaps. 3–4). They argue that, by fusing positivism with such "a priori" concepts, the rival disciplines virtually require that research outcomes be consistent with their estimate of their own importance in the behavior at issue.

Nowhere is this more true than in understanding why Sutherland deemed it necessary to attack the Gluecks' work. The Gluecks were gaining widespread readership and, with the exception of Sutherland, praise.¹⁹ More important, Sutherland saw the multiple-factor approach, with its inclusion of such individual-level factors as age and mental capacity, as a threat to a substantive version of sociological positivism. As Gottfredson and Hirschi argue, "Criminology, which came to be dominated by sociology, eventually saw the destruction of individual-level correlates as a prerequisite to 'truly social' theorizing" (1990, p. 70, n. 3). Thus, sociological positivism as practiced by Sutherland did not attempt to establish the sociological causes of crime *independent* of individual-level factors in the Durkheimian tradition. Rather, crime was viewed by Sutherland as a social phenomenon that could *only* be explained by social (i.e., nonindividual) factors. As a result, Sutherland "explicitly denied the claims of all other disciplines potentially interested in crime" (Gottfredson and Hirschi 1990, p. 70).²⁰

When combined with Sutherland's adoption of analytic induction, it was then possible for him to interpret all phenomena in a manner consistent with a pure sociological theory of differential association (see also Matsueda 1988). As Hirschi and Gottfredson have argued elsewhere, "Sutherland invented or adapted standards of scientific adequacy that

¹⁹ For example, Walter Reckless, a noted sociologist at Ohio State University, argued in a review of *Juvenile Delinquents Grown Up* that the Gluecks were "pre-eminent in this field of research" (1941, p. 736). Although critical of key aspects of the Gluecks' research, Reckless concluded that, "in spite of shortcomings which inevitably greet pioneer attempts at forecasting, the Gluecks' persistence in their endeavor to explain and to predict criminal outcome by the method of factoring is courageous and praiseworthy" (p. 738). Similarly, Donald Taft, a sociologist at the University of Illinois, wrote in a review of *Later Criminal Careers* that "this valuable book . . . illustrate(s) the importance of long-time criminological research" (1937, p. 940). Further, Taft emphasized the "painstaking type of research which the Gluecks—more than any other investigators—are furnishing" (p. 941).

²⁰ Sutherland even went so far as to express regret that nonsociologists received funds for research in criminology (see Cohen et al. 1956, p. 270).

permitted an ad hoc interpretation of research findings in ways consistent with the theory of differential association" and thus that "the genius of Sutherland . . . was that as he produced a theory of criminality, he simultaneously produced a science to protect it from research results and from competitive theories" (1980, p. 10). This model effectively insulated Sutherland's theory from the results of empirical research based on a multiple-factor approach by defining the necessary and sufficient causes of crime. Hence, with the 1939 edition of *Principles* as a backdrop, criminology became a field closed to the possibility that disciplines other than sociology might have something to contribute (Gottfredson and Hirschi 1990, p. 70).

It is important to recognize here that the error of positivism when interpreted as a substantive theory of crime was not sociology's alone—it was embraced by biology, psychology, and economics as well. The difference, however, is that sociology was successful in its attempt to take over the study of crime (for details, see Gottfredson and Hirschi [1990]; and Gaylord and Galliher [1988]).²¹ Sutherland's leadership role in this action was widely recognized—so much so that Robert Merton even compared Sutherland's *Principles of Criminology* to such disciplinary classics as Samuelson's *Economics* and Gray's *Anatomy* as books that "leave an enduring impress on generations of students" (1971, p. vii).

Defending the Sociological Perspective

That Sutherland became the warrior for sociology's coup of criminology was also linked to his social position and rising influence in the sociological discipline. In 1935 he moved from the University of Chicago to Indiana University as head of the Department of Sociology. Exercising a leadership position there, he went on to become president of the American Sociological Association in 1939. In 1940 he was elected president of the Sociological Research Association. He was also elected president of the Ohio Valley Sociological Society in 1942.

As argued in a recent paper by Galliher and Tyree (1985, p. 111), Sutherland was driven by a strong "anti-psychiatry ideology," and he saw this issue as a "professional turf" concern in making the case for a sociological criminology with himself as its leader (see also Gaylord and

²¹ In this regard it is interesting to note Sheldon Glueck's bitter and hostile reaction: "The most confident and severest critics have been a group whose writings have the tone of fire-breathing chevaliers eager to do battle for that purest queen of the exact sciences, Sociology, to which the authors of *Unravelling Juvenile Delinquency* allegedly did not pay adequate tribute" (1960, p. 284). The Gluecks clearly did not take criticism well.

Gallihier 1988; and Goff 1986). Sutherland's intentions were not lost on his contemporaries either. As his former colleague Karl Schuessler writes, Sutherland had a "bias against psychiatry" (1973, p. xvii) and "did not broaden his theoretical model to accommodate biological and psychological factors. In fact, he was severely critical of those criminologists who stretched their framework to include every possible factor, however disparate those factors might be" (1973, p. x). Clearly, it came to serve both Sutherland's interests and those of the discipline to establish proprietary rights in the study of crime.

There is also little doubt that Sutherland accurately perceived his own role in spearheading the sociological undermining of the Gluecks. Indeed, in a manner destined to embitter the Gluecks, Sutherland alone reviewed almost all of their books in professional journals (mainly law reviews) in the 1930s and 1940s. In a letter to Sheldon Glueck dated February 11, 1944, Sutherland even wrote, "I refused three invitations from journals to review your *Criminal Careers in Retrospect* because I did not desire to acquire an institutional status as a critic of your work." However, he goes on to say that he did in fact write the review when he "felt that it would be possible to write a review which would be relatively formal" (1944b).

His 1944 letter also continued the dismissal of individual-level correlates of crime that was consistent with the new outlook of the 1939 edition of *Principles*. While writing to Sheldon Glueck to "assure you that I have a most kindly personal attitude toward you," he went on to criticize the relevance of age to crime, arguing that the relationship was only "slightly more than chance." Sutherland also attacked the Gluecks' long-standing hypothesis concerning the stability of antisocial behavior over the life course. In particular, he contradicted his 1924 book and argued that "I believe that you do not demonstrate that these childhood characteristics have more than a slight relationship to behavior in middle age" (1944b, p. 2). In fact, Sutherland repeated his earlier charge that this "was a preconception and not a finding" (1944b, p. 2; see also Sutherland's formal review [1944a]).

In addition, Sutherland placed the Gluecks' research in the same camp as William Sheldon and E. A. Hooton, two researchers at Harvard interested in the biological causes of human behavior (see Cohen et al. 1956, pp. 270-326). The result was that the Gluecks were perceived as being interested in *only* the biological basis for criminal behavior. It is no surprise, then, that the most controversial aspect of the Gluecks' research vis-à-vis sociology was their inclusion of constitutional factors—especially body structure—in the study of crime. Indeed, sociologists have always had a long-standing aversion to biological explanations of human behavior. As Rowe and Osgood note, "In most sociological treat-

ments of crime and delinquency, genetic explanations are either ignored or ridiculed" (1984, p. 526).

Ironically, however, the Gluecks never posited a deterministic biological model. They argued instead that biological features set the context for social forces. That is, the Gluecks were interested in how social factors mediated the undeniable differences among individuals in such crime-relevant characteristics as strength. As Sheldon Glueck argued, "Those criminologists who call attention to variations in the strength of different hereditary drives and controlling mechanisms do not claim that criminalism *per se* is inherited, but merely point to the too-often sociologically-underemphasized if not ignored biological fact that, in the eyes of nature, all men are not created equal and that some, because of certain traits useful to the kind of activities involved in criminal behavior, probably have a higher delinquency *potential* than others" (1956, p. 94).

Sutherland also failed to recognize that the Gluecks were as critical of the work of Sheldon as was Sutherland himself. For example, in a review of Sheldon's *Varieties of Delinquent Youth* (1949), the Gluecks stated, "Space limitations do not permit us to illustrate [the] deficiencies . . . in the work under review" with respect to standard canons of science (1950b, p. 215). The Gluecks went on to totally dismiss the conclusions made by Sheldon, in large part because of an inadequate sampling design (1950b, p. 215). In a similar manner, Sutherland (1951) argued that Sheldon's research methods were suspect and his research failed to establish the physical differences between offenders and nonoffenders. In particular, Sutherland, like the Gluecks, pointed out that the "manner of selecting cases . . . effectively prevents [Sheldon] from reaching valid conclusions regarding delinquency" (1951, p. 10). Thus, not only was Sutherland's equation of the Gluecks with biological determinists such as Sheldon and Hooton (see, e.g., Sutherland and Cressey 1978, pp. 123-24) an error of sociological positivism, Sutherland's wholesale rejection of biological influences on human behavior appears to be at odds with current knowledge (see esp. Rowe and Osgood 1984; Udry 1988; Cohen and Machalek 1988).

Sutherland's final and probably most severe attack on the Gluecks concerned forms of data collection and analysis. Quite simply, Sutherland went so far as to imply that the Gluecks fudged their data. His claim was expressed in several ways. In a published review he implied that the Gluecks used *ex post facto* psychiatric evaluations and thus that the mental diagnosis was "necessarily" associated with the behavior (Sutherland 1937b, p. 186). More damning were "informal" comments made in the 1937 review circulated among colleagues across the country. He stated, "When the data and methods are examined, they are found to be completely untrustworthy" (1937c, p. 14), and he specifically charged

that the Gluecks "must have made their classification after the delinquency or nondelinquency of offenders during the second period was already known to them, as well as after the failure to meet economic or family responsibilities and the other aspects of behavior during the second period were already known to them. The classification is therefore nothing except an expression of the authors' a priori conception of the relationship between overt behavior and mental condition. Nothing except clerical errors could have prevented a high correlation between mental abnormality and persistence in criminal behavior" (1937*c*, pp. 15-16). With this alleged fatal flaw, not only could the Gluecks' data be dismissed, but their entire substantive framework, as judged by Sutherland, "breaks down completely" (1937*c*, p. 17).

The Gluecks appeared quite aware of the underlying message of Sutherland's criticisms. As they wrote in their 25-page rejoinder, "You distinctly imply that we have somehow manipulated our materials to get the result for which we were looking from the beginning. This is a very serious charge to make and we are wondering how you could possibly have arrived at it. It is very startling, to say the least, that . . . you could infer that we manipulate our materials" (1937*b*, p. 20). The Gluecks argued that the charge ought to be "ignored as undeserving of notice," but since Sutherland had, in their words, the "temerity" to make it (1937*b*, p. 20), they countered with the obvious fact that Sutherland ignored: "It seems quite self-evident that the psychiatrists who made the examinations at the different hospitals throughout the country at different times and without the knowledge that the Gluecks would come along, many years later, and make follow-up studies did not conspire with us beforehand to see that the unreformed would have a higher incidence of mental deviation than the reformed. They could not possibly have known, when they made the examinations, which of the men would many years later turn out to be recidivists and which would reform" (1937*b*, p. 20). The rest of their response rebutted in detail the thrust of Sutherland's criticisms.

Sutherland's tenaciousness in striving for a pure sociological reading of the evidence extended to his own work as well. For example, in a detailed examination of the origins and development of Sutherland's *The Professional Thief* (1937*a*), Snodgrass argues that "Sutherland overestimated the class-origin of the professional thief" and "virtually ignored . . . Jones' addiction to narcotics" (1973, pp. 11, 13). Snodgrass's evaluation of this can be interpreted as Sutherland's use of a misguided sociological positivism:

A possible, but perhaps uncharitable, explanation for this omission might be the common theoretical association of drug dependence with psychological maladjustment. Sutherland's sociological interpretation would have

been considerably weakened, or at least challenged, had he revealed to the reading audience that professional thieves were often "dope fiends," as they were known then, who shot-up with the drugs obtained from the money earned in their work. Sutherland was with this book also opposing the psychological school by attempting to picture thieves as mentally stable. Evading the drug issue was perhaps a way of supporting his sociological explanation and avoiding a psychological controversy. [1973, p. 15]

Similarly, Galliher and Tyree (1985) examined Sutherland's research on the origins of sexual psychopath laws and found that he ignored evidence contrary to his hypothesis. Moreover, Galliher and Tyree discovered "curious lapses and inconsistencies in the evidence he [Sutherland] marshaled in support of his conclusions" (1985, p. 100). More specifically, they argue (1) that Sutherland did not systematically review the newspapers from the states he discussed, (2) that his conclusions about the press were based on a very selective sample of sensationalistic pieces, especially lurid magazine articles, and (3) that he ignored critics such as Tappan, Inbau, and Gault who questioned his claims. The selective attention to facts was attributed to Sutherland's strong "antipsychiatric ideology" (1985, p. 110).

We emphasize that, in our view, Sutherland was not driven by individual maliciousness or intentional dishonesty in his own work or in his attack on the Gluecks. Rather, Sutherland's behavior may be seen as *socially* conceived by the factors analyzed above—a substantive version of sociological positivism fused with a false criterion of causality supplied by analytic induction. In conjunction with his rising social position as the leading sociologist of crime, it seems less surprising that Sutherland selectively interpreted evidence in the process of dismantling the competition. In fact, it seems fair to suggest that Sutherland actually believed the Gluecks' data *had* to be wrong and the sociological perspective portrayed in the idea of differential association right.²²

THE TRANSMISSION OF ACCEPTED WISDOM

Despite the unproven nature of Sutherland's charges against the Gluecks, the damage was done and took on a life of its own that remains to this day in sociology. The momentum was facilitated in large part by the social and institutional context within which both parties operated. Hav-

²² It is beyond the scope of this paper to evaluate the research bearing on the validity of differential association theory. Besides, this has been done elsewhere—for excellent arguments that take opposing views see Kornhauser (1978) and Matrueda (1988). It will come as no surprise to learn that the Gluecks did not think much of differential association. At one point Sheldon Glueck referred to the idea of differential association as "puerile" and as a "roof without a house" (1956, pp. 92, 99).

ing access to the benefits offered by a graduate sociology department, Sutherland became something of a magnet for Ph.D. students who would go on to carry the torch of differential association theory and a disregard for the Gluecks' research. In particular, Donald Cressey was a student of Sutherland's at Indiana University who later coauthored six editions of *Principles*. But there were also other prominent graduate students such as Albert Cohen and Lloyd Ohlin who were deeply influenced by Sutherland. As Cohen remarked in an interview with Laub (1983) about Indiana University in the late 1930s, at the height of the Sutherland-Glueck debate, "I would say all of the better graduate students were in criminology. They were all studying with Sutherland. There was a sense that the department of sociology at that particular time was really the breeding ground of theory. You were there at the source. The most exciting things in criminological theory were happening right there and they all somehow had to do with differential association. Differential association was theoretically the end of the world" (Laub 1983, p. 186). Cohen's remarks seem entirely apt in describing Sutherland's dedication to differential association and inculcating a generation of students that would do likewise. Indeed, Cohen noted that Sutherland "functioned as a kind of a guru" (Laub 1983, p. 186).

The Sutherland mystique even extends to the imputation of laudatory motives on the part of Sutherland in his judgments of the Gluecks. For example, Snodgrass has written that "Sutherland's obsession with honesty is no small reason for why he got into such a fracas with the Gluecks" (1972, p. 227). Schuessler writes that "he [Sutherland] was uncanny in his ability to spot errors in statistical logic and patient in locating the trouble—witness his unraveling of the Gluecks" (1973, p. xxxv). Similarly, Geis and Goff note that Sutherland's "writings are unsparing in their exposure of false syllogism, sloppy logic, the unsupported inference, and the generalization rooted in infancy rather than fact" (1983, p. xxi). Finally, Snodgrass (1972) argues that in his review (1934b) of *One Thousand Juvenile Delinquents* Sutherland "was one of the first to point to the Gluecks' exaggerations and omissions of data," and he goes on to state, without any documentation, that this is "a charge which has subsequently been repeated and enlarged, and a *fact* which might insure that [the Gluecks'] research will come to be discredited, if not disregarded, by future students and historians of the discipline" (1972, p. 244; emphasis added).

At the same time, key aspects of the Gluecks' perspective as well as their own particular institutional/historical context also contributed to their demise. We have identified six specific reasons why sociology, especially after Sutherland's death in 1950, was so hostile to the Gluecks' work. First, the Gluecks had a tendency to infuse their works with moral

statements that reflected middle-class biases. For instance, in regard to the management of income, the Gluecks wrote that families of delinquents were "living from day to day, borrowing without thought of their ability to make reimbursement and showing little comprehension of the value of limiting their expenditures to conform to a meager income" (1950a, p. 108). On all accounts, the Gluecks simply viewed delinquents and their families as inferior. Moreover, although the Gluecks' data were derived from multiple reports describing actual behaviors, the Gluecks often injected moral judgments in their summary coding scheme using categories such as good, fair, and poor to describe these behaviors (see Glueck and Glueck [1950a] for numerous examples).

Second, as mentioned above, the Gluecks were atheoretical in their approach to the study of crime. But more than that, the Gluecks were *anti*theory. Although they emphasized an empirical tradition and sought to identify any and all characteristics that may be related to crime and delinquency, they regarded abstract theory as idle speculation and not useful from a scientific view. Thus, the Gluecks did not present a theory of crime or even any systematic theoretical ideas in their numerous works. In fact, their idea of a theoretical statement was to present a "tentative causal formula or law" that merely summarized their findings distinguishing offenders from nonoffenders (see Glueck and Glueck 1950a, pp. 281-82).

Third, despite embracing a multiple-factor approach, the Gluecks downplayed or ignored traditional sociological variables like stratification, peer group, culture, and community characteristics. As Snodgrass has noted (1972, p. 9), the Gluecks' focus was "bio-constitutional and psycho-social." Specifically, the Gluecks downplayed social factors (e.g., delinquent associates) in favor of morphology, temperament, and early family influences (see Glueck and Glueck 1943, p. 69; 1950a; 1956; 1962; 1968, p. 170). Overall, the Gluecks' research reflected a restricted range of interest in key sociological variables presumed to be related to crime.

Fourth, recall that Sheldon Glueck was a law professor and Eleanor Glueck a soft-money research assistant. By function of their social position within the academic institution, the Gluecks were precluded the opportunity to train graduate students and develop the sort of following that Sutherland had. Quite simply, no one had a stake in defending the Gluecks. We believe this context is crucial in understanding the transmission of Sutherland's legacy.

Fifth, our review of the Glueck papers, especially their personal correspondence (i.e., notes and letters), leads to the conclusion that the Gluecks suffered from social awkwardness and a severe difficulty in public relations. Whereas Sutherland was well liked and perceived to be "humble" and "gentle" (see Laub's [1983] interviews with Cressey, Co-

hen, and Ohlin), the Gluecks were stubborn and pompous and had great difficulty accepting any criticism of their work, justified or not, as something other than a personal attack on their integrity (see also S. Glueck 1960). This no doubt impeded their attempts to establish a cadre of supporters.

Sixth, and perhaps most important, the Gluecks' research was driven by pragmatic concerns. More precisely, they sought to influence social policy through the use of their prediction tables in two distinct ways. One was to improve the process of decision making by judges, probation officers, parole boards, and military officials.²³ The second was to identify potential delinquents at school age or perhaps even as early as age two and three (see E. Glueck 1966; and Glueck and Glueck 1959) in order to provide therapeutic intervention. For example, the Gluecks argued that the selection of potential delinquents at an early age "would make possible the application of treatment measures that would be truly crime preventive" (1950a, p. 257). Moreover, the Gluecks promoted this interest in the popular literature as well as in scholarly books and journals (see, e.g., Glueck and Glueck 1952; Morgan 1960; Callwood 1954; and Dresler 1955).

The Gluecks' research on prediction has been severely criticized on methodological grounds (see, e.g., Reiss 1951; Hirschi and Selvin 1967; and Laub and Sampson 1988). However, this interest reflected their professional interests and intellectual history. Although at the time sociology was not explicitly linked to social policy, such practical applications were the norm for the discipline reflected in the background of the Gluecks—law, psychiatry, education, and social work. In addition, this pragmatic orientation was consistent with the interests of the Gluecks' mentors such as Bernard Glueck and William Healy. Thus, through their interest in prediction techniques, the Gluecks promoted an emphasis on individual-level analysis and advocated the penetration of psychiatric expertise into the formal systems of social control. In fact, Sheldon Glueck maintained that "dynamic psychiatry offers the greatest promise of any single discipline for the discovery of the complex causes and motivations of emotional, intellectual, and behavioral maladjustment and for developing effective prophylactic and therapeutic techniques. For the psychiatric approach necessarily deals with the blended *interplay* of the forces of nature and nurture, instead of grossly overemphasizing innate predisposition, on the one hand, or external environment and general cultural influences, on the other" (1962, p. 158).

²³ For an overview of prediction research in the criminal justice area, see Glueck and Glueck (1959); for an application of the prediction tables in the military, see Schneider et al. (1944).

The Gluecks even envisioned a criminal justice system based on "the rational exercise of discretion enlightened by the reports of psychiatric, psychological, and social workers who ought . . . to be indispensable adjuncts to criminal courts and to classifying agencies and correctional establishments" (S. Glueck 1962, p. 139). Furthermore, the Gluecks encouraged the use and expansion of court clinics and child guidance centers. The result of this concern with social policy and the explicit promotion of the professional interests of the field of psychiatry was to further alienate the Gluecks from mainstream sociology as reflected by the works of Sutherland.²⁴

Having placed the Sutherland-Glueck debate in social and historical context, we now turn to a brief assessment of the Gluecks' legacy. If Sutherland and common wisdom are correct (see also Snodgrass 1972, p. 244), then the Gluecks' research should have long ago faded into irrelevance. As it turns out, it is not even necessary to rely on the Gluecks' own defense to show the exaggerated nature of Sutherland's critique. Indeed, it is ironic that, despite numerous personal flaws and narrowly conceived professional interests, the Gluecks' substantive research in criminology remains strong.

A REVISIONIST ASSESSMENT OF THE GLUECKS' RESEARCH

The Gluecks could not have known the implications of their work for modern criminology. To speak of their "contributions" to present research is thus, as shown by Jones (1977, pp. 282-89), to commit the error of "presentism." We avoid this tendency by assessing the *validity* of their research methodology and substantive conclusions—that is, do they stand up to external verification? Moreover, to the extent that the current research agenda in criminology is simply an unacknowledged version of the Gluecks', the validity and importance of their work is further increased. Our assessment is based on a brief overview of four fundamental claims made by the Gluecks that, as detailed above, were dismissed by Sutherland.

Age and crime.—In a recent and highly cited article in this *Journal*, Hirschi and Gottfredson (1983) have argued that the age-crime relationship is one of the strongest in criminology and is generally invariant across time and space. Specifically, Hirschi and Gottfredson have con-

²⁴ It should be pointed out that the Gluecks' research was well received and respected in European countries (Snodgrass 1972, p. 330). This may reflect the fact that, historically, European criminology was dominated by the legal and medical professions in contrast to the United States where criminology was dominated by sociology (see Mannheim 1972, p. 2).

tended (see also Gottfredson and Hirschi 1986) that crime declines with age and that this pattern holds true even for the most active offenders (career criminals). Their evidence is based on a comprehensive review of extant data on the age-crime relationship covering many different cultures and time periods.

Whether or not the age-crime curve is "invariant" across time and space, the research literature clearly shows that the Gluecks were correct about the fundamental *importance* of age, and that their evidence collected over 40 years ago remains some of the best available on the subject. As Gottfredson and Hirschi concluded, "The Gluecks' data are corroborated by other sources" (1988, p. 50, see also pp. 39, 49). Even the most vocal critics of Hirschi and Gottfredson agree, unlike Sutherland, that age is an important predictor of crime and have also turned explicitly to the Gluecks' data for insight (see, e.g., Blumstein, Cohen, and Farrington 1988, pp. 12–13).

Criminal careers and longitudinal research.—The field of criminology is currently embroiled in a bitter dispute over the value of longitudinal research and the criminal-career paradigm. The spark for this dispute was the publication of a recent report by the National Academy of Sciences (NAS; Blumstein et al. 1986) wherein it was concluded that longitudinal research was necessary to study the causes of criminal careers. Moreover, the NAS report called for major new research initiatives to estimate four parameters of the criminal-career paradigm: *participation* (the distinction between those who engage in crime and those who do not), *frequency* (the rate of criminal activity of those who are active), *seriousness* of offenses committed, and *career length* (the length of time an offender is active). It is argued that valid estimates of these parameters are needed to determine effective crime-control policies in terms of selective incapacitation and individual deterrent effects (Blumstein et al. 1986, pp. 202–4). However, Gottfredson and Hirschi (1986, 1987, 1988) have forcefully attacked the NAS report, basically by claiming that longitudinal research is unnecessary and that selective incapacitation is impossible to achieve.

It is much beyond the scope of this paper to resolve the debate over longitudinal research and criminal careers. However, it is not necessary to do so to acknowledge that the Gluecks were the first to systematically put forth the criminal-career paradigm. As noted earlier, the Gluecks originally made the distinction between frequency and participation, arguing that the causes of recidivism were different from the causes of onset (Glueck and Glueck 1930, 1934a, 1945). They were also the first criminologists to collect longitudinal data on a large scale, follow offenders over long periods of time, study career length, and, unbeknownst to

most, suggest the policy of selective incapacitation (Glueck and Glueck 1945, pp. 106–8; 1968, p. 166).

In short, regardless of whether one agrees with the current emphasis in criminology on criminal-career research and longitudinal designs (for opposing viewpoints, see Blumstein et al. [1988] and Gottfredson and Hirschi [1988]), there can be little doubt that such an emphasis basically revives the Gluecks' original arguments. In point of fact, the most adamant critics of the criminal-career paradigm attribute its origin to the Gluecks (see Gottfredson and Hirschi 1988, p. 39).

Stability of crime and deviance.—One of the Gluecks' early and major contributions to criminology was their hypothesis of stability of crime and deviance across the life course. Unlike Sutherland, who saw criminality as an ever-changing construct dependent on changing social influences, the Gluecks documented the relative stability of between-individual differences in crime. The Gluecks' hypothesis can be seen as one of "longitudinal consistency," which concerns "the extent to which individuals in a group retain their relative position on a certain dimension or characteristic . . . at different points in time" (Olweus 1979, p. 852). As they argued in a section of *Delinquents and Nondelinquents in Perspective* aptly titled "The Past Is Prologue," "while the majority of boys originally included in the nondelinquent control group continued, down the years, to remain essentially law-abiding, the greatest majority of those originally included in the delinquent group continued to commit all sorts of crimes in the 17–25 age-span" (Glueck and Glueck 1968, p. 170). In a related argument, the Gluecks' also hypothesized that early life experiences had strong effects on crime in the adult years.

What do the data say? The evidence on longitudinal consistency is unequivocally clear—antisocial behavior is a remarkably stable phenomenon (Loeber 1982; McCord 1979; Robins 1966; Olweus 1979; Huesmann et al. 1984; Gottfredson and Hirschi 1990). For example, Olweus reviewed over 16 studies on aggressive behavior and found "substantial" stability. More precisely, the correlation between early aggressive behavior and later criminality averaged .68 for the studies reviewed (Olweus 1979, pp. 854–55). Loeber completed a similar review of extant literature in many disciplines, concluding that a "consensus" has been reached in favor of the stability hypothesis: "Children who initially display high rates of antisocial behavior are more likely to persist in this behavior than children who initially show lower rates of antisocial behavior" (1982, p. 1433). In probably the most influential study of its kind, Huesmann et al. (1984) studied the aggressiveness of 600 subjects, their parents, and their children over a 22-year period. They concluded that "early aggressiveness was predictive [correlation of .50 for males] of later serious

antisocial behavior, including criminal behavior, spouse abuse, traffic violations, and self-reported physical aggression. Whatever its causes, aggression can be viewed as a persistent trait that may be influenced by situational variables but possesses substantial cross-situational constancy" (1984, pp. 1120, 1128).

Finally, McCord (1979) and Robins (1966) demonstrated the powerful effects of early-life experiences on later adult behavior. In fact, McCord showed that predictions of *adult* criminality based on childhood family experiences were more accurate than predictions based on the individuals' juvenile criminal records (1978, p. 1485). Sutherland's protestations notwithstanding, the Gluecks' early hypothesis of stability, later confirmed in *Delinquents and Nondelinquents in Perspective* (Glueck and Glueck 1968), has itself been confirmed by an impressive body of interdisciplinary research.

Social control, the family, and delinquency.—Hirschi's (1969) influential *Causes of Delinquency* stated the now widely cited reformulation of assumptions about human nature implicit in differential association theory. As he argued, the question is not why do they do it, but rather "Why *do* men obey the rules of society: Deviance is taken for granted; conformity must be explained" (1969, p. 10). Consider now Sheldon Glueck's earlier conceptualization of the problem, which also directly contradicts differential association theory: "What is there to be learned about simple lying, taking things that belong to another, fighting, and sex play? . . . One must conclude that it is not delinquent behavior that is learned; that comes naturally. It is rather *non*-delinquent behavior that is learned. . . . Law-abiding character formation is a hard-won process" (1956, pp. 94–95). The Gluecks were thus early proponents of a social-control perspective, arguing that the child must be socialized to overcome natural asocial or antisocial impulses. Although unsystematic, the Gluecks' notion of social control led them to study the role of families, schools, opportunities (e.g., peers and use of leisure time), and formal sanctions in explaining crime and delinquency.

Of all the factors they studied, however, the Gluecks clearly focused most attention on the *family*. They identified the key predictors of delinquency as inconsistent and/or lax disciplinary practices by parents, low supervision and monitoring of the youth's behavior, and attenuated attachment between parent and child (1950a, p. 261). These same family process factors have subsequently been shown to be sturdy and strong predictors of juvenile delinquency in a variety of settings—including different time periods, geographic location, age groups, and methodology (see esp. Farrington and West 1981; Robins 1966; Hirschi 1969; Patterson 1982). And in the most exhaustive review available on families and crime, Loeber and Stouthamer-Loeber (1986, pp. 37, 120) conclude that "as-

pects of family functioning involving direct parent-child contacts" are the most powerful predictors of delinquency and other juvenile conduct problems.

We have also reanalyzed the raw data from the Gluecks' *Unraveling Juvenile Delinquency* from the vantage point of (a) recent theoretical advances on the family (e.g., Hirschi 1969, 1983; Patterson 1982) and (b) recent advances in multivariate techniques. The results (see Laub and Sampson 1988) demonstrate that the strongest predictors of delinquency are the same family variables identified by the Gluecks as the most important correlates of delinquency over 30 years ago—discipline, supervision, and attachment. Not only do these results correspond with current research *and* theory, they confirm the Gluecks' own analyses.

Overall, then, major areas of the Gluecks' research—age and crime, longitudinal research/criminal careers, stability of crime and antisocial behavior, and social-control theory with a focus on family processes—have been shown to be either (a) essentially correct or (b) currently dominating the research agenda in criminology. Moreover, despite their methodological shortcomings, which were real and cannot be overlooked (see Laub and Sampson 1988, pp. 357–61), researchers have replicated the Gluecks' basic findings using new methods and procedures on their original data. Therefore, while the Gluecks' research has been *disregarded* by sociologists, as Snodgrass (1972, p. 245) predicted, it has not been *discredited* by subsequent research. Indeed, if the Gluecks' data and analysis were so poor and/or fudged as Sutherland claimed, it is virtually impossible that their findings would have been replicated time and time again by external investigators using other data and by our analyses of their original data.²⁵

CONCLUSIONS

There is no doubt that Edwin Sutherland made substantial contributions to the field of criminology, especially in the areas of white-collar and professional crime and the development of the theory of differential association. Unlike other contemporaries (e.g., Clifford Shaw, Henry

²⁵ We also conducted a detailed validation of the Gluecks' data from the *Unraveling* study. Using the original handwritten interview schedules currently preserved at the Henry A. Murray Research Center of Radcliffe College in Cambridge, Mass., we successfully reconstructed the full longitudinal data set and found the data to be consistent with published reports as well as our own logical consistency checks. Moreover, we were able to trace and interview several members of the Gluecks' original research team for the *Unraveling* study, including Richard LaBrie, Mildred P. Cunningham, Sheila Murphrey, and Mary H. Moran. Taking all this information into account, we uncovered no evidence of anything other than meticulous data collection

McKay, Thorsten Sellin) Sutherland was also one of the first to offer a systematic theory that attempted to explain individual-level as well as macro-level differences in crime. He is thus appropriately revered as one of the most important criminologists to date, and his work continues to influence modern research (see Matsueda 1988).

Nevertheless, this state of affairs should not blind us to the brute force of Sutherland's critique of the Gluecks' work. Reflecting broader concerns about the shape and image of criminology in society, Sutherland's criticisms stemmed from his rejection of the multiple-factor approach, his adherence to a substantive version of sociological positivism, and his position as the dominant criminologist of the 20th century. When supplied with a false criterion of causality offered by his conversion to analytic induction, Sutherland felt free to dismiss the Gluecks' empirical contributions to criminological knowledge.

The power of Sutherland's critique is hard to overestimate. To this day sociological positivism is dominant and the Gluecks are often seen as relics of a distant past. Having been reified by the academic community, the Gluecks' fate has become so much a social fact that the best-selling criminology text in America (Siegel 1989), with over 1,000 references and 550 pages, cites the Gluecks but once. In true Sutherland tradition, the citation is to mesomorphy—by linking the Gluecks' work to "Lombrosians and other biological determinists" it is summarily rejected as "methodologically unsound" and "invalid" (Siegel 1989, p. 126). By contrast, our analysis has provided a revisionist assessment of the Gluecks' contributions to fundamental issues in criminological research that reaches the opposite conclusion.

Perhaps more important, however, our paper demonstrates the need to understand the processes by which knowledge is socially constructed. In particular, through a contemporary look at the Sutherland-Glueck debate we have provided new insights into the historical and intellectual context of criminological thought. Our findings support recent developments in intellectual historiography, which asserts that classic works in the history of ideas cannot be dealt with according to ordinary processes of causal explanation, but that their understanding presupposes a grasp of the authors' intentions and that this in turn requires the reconstruction of the conventions governing discussion of the issues of concern (see esp. Jones 1977; 1986, p. 618; Beirne 1987).

Moreover, we extended this approach to include an investigation of not only the historical context of the Sutherland-Glueck debate but the social positions and institutional settings they occupied within that context (see Camic 1987). We showed that the formation and substance of both Sutherland's *and* the Gluecks' positions were deeply affected by their respective methodological, disciplinary, and even institutional bi-

ases. To Sutherland, the Gluecks' multiple-factor approach to crime represented a symbolic threat to the intellectual status of sociological criminology of which he was the leader, and hence his attack on the Gluecks' interdisciplinary thought served the larger interest of sociology in establishing proprietary rights to criminology. To the Gluecks, Sutherland represented abstract theorizing about crime from a unilateral (i.e., sociological) perspective. Moreover, this general theory was divorced from any social policy designed to prevent and control delinquency. Given the Gluecks' interest in using predictive techniques for pragmatic ends as well as their own lofty views of the importance of their research, they had no choice but to rebut Sutherland's critiques and launch a counterattack on all criminologists who disagreed with their position. The accepted fates of Sutherland and the Gluecks are thus interwoven and cannot be understood simply by reference to the truth or falsity of their research findings but instead must be placed within the social and institutional context of their debate.

In sum, our efforts support Jones's sobering yet penetrating conclusion: "For surely it is curious that, at the same time that modern sociologists struggle to expand their imaginations and thus to develop new ideas to account for the complexities of human behavior, there is nothing of which we are more ignorant than the nature of the process by which such ideas emerge, are received, grow, change, and are eventually surpassed" (1977, p. 311). This is perhaps nowhere more true than in criminology, where "new" developments are constantly offered in what seems to be a collective amnesia about the past. We hope to have counteracted this tendency by specifying the social foundations of one of the major developments in criminological knowledge this century.²⁶

REFERENCES

- Abramson, Jill, and Barbara Franklin. 1986. *Where They Are Now: The Story of the Women of Harvard Law 1974*. New York: Doubleday.
- Beirne, Piers. 1987. "Adolphe Quetelet and the Origins of Positivist Criminology." *American Journal of Sociology* 92:1140-60.
- Blumstein, Alfred, Jacqueline Cohen, and David P. Farrington. 1988. "Criminal Career Research: Its Value for Criminology." *Criminology* 26:1-35.
- Blumstein, Alfred, Jacqueline Cohen, Jeffrey Roth, and Christy Visher, eds. 1986. *Criminal Careers and "Career Criminals."* Washington, D.C.: National Academy.
- Cabot, Richard C. 1926. *Facts on the Heart*. Philadelphia: Saunders.
- Callwood, June. 1954. "Will Your Youngster Turn to Crime?" *Maclean's Magazine*, September 15.

²⁶ See Beirne (1987) for a sociological account of the 19th-century origins of positivist criminology.

- Camie, Charles. 1987. "Historical Reinterpretation of the Early Parsons." *American Sociological Review* 52:421-39.
- Cohen, Albert K. 1970. "Multiple Factor Approaches." Pp. 123-26 in *The Sociology of Crime and Delinquency*, 2d ed. Edited by Marvin Wolfgang, Leonard Savitz, and Norman Johnston. New York: Wiley.
- Cohen, Albert K., Alfred Lindesmith, and Karl Schuessler, eds. 1956. *The Sutherland Papers*. Bloomington: Indiana University Press.
- Cohen, Lawrence E., and Richard Machalek. 1988. "A General Theory of Expropriative Crime: An Evolutionary Ecological Approach." *American Journal of Sociology* 94:465-501.
- Current Biography Yearbook* 1957. "Glueck, Sheldon and Eleanor Touroff." 18:10-12. New York: H. W. Wilson.
- Dressler, David. 1955. "You: The Newly Married—the Young Parent Can Prevent Delinquency." *Everywoman's Magazine*, September.
- Faculty Committee Report. 1954. *The Behavioral Sciences at Harvard*. Eleanor T. and Sheldon Glueck Joint Papers. Harvard Law School Library, Cambridge, Mass.
- Farrington, David P., and Donald West. 1981. "The Cambridge Study in Delinquent Development." Pp. 137-45 in *Prospective Longitudinal Research*, edited by S. Mednick and A. E. Baert. Oxford: Oxford University Press.
- Frankfurter, Felix. 1934. Introduction to *One Thousand Juvenile Delinquents*, by Sheldon and Eleanor Glueck. Cambridge, Mass.: Harvard University Press.
- Gallagher, John F., and Cheryl Tyree. 1985. "Edwin Sutherland's Research on the Origins of Sexual Psychopath Laws: An Early Case Study of the Medicalization of Deviance." *Social Problems* 33:100-113.
- Gaylord, Mark S., and John F. Gallagher. 1988. *The Criminology of Edwin Sutherland*. New Brunswick, N.J.: Transaction.
- Geis, Gilbert. 1966. "Review of *Ventures in Criminology*." *Journal of Criminal Law, Criminology, and Police Science* 57:187-88.
- . 1970. "Review of *Delinquents and Nondelinquents in Perspective*." *Crime and Delinquency* 16:118-19.
- Geis, Gilbert, and Collin Goff. 1983. Introduction to *White Collar Crime: The Uncut Version*, by Edwin H. Sutherland. New Haven, Conn.: Yale University Press.
- . 1986. "Edwin H. Sutherland's White-Collar Crime in America: An Essay in Historical Criminology." *Criminal Justice History* 7:1-31.
- Gibbons, Don. 1979. *The Criminological Enterprise: Theories and Perspectives*. Englewood Cliffs, N.J.: Prentice-Hall.
- Gilboy, Elizabeth Waterman. 1936. "Interview with Eleanor Touroff Glueck." *Barnard College Alumnae Monthly* 26:11-12.
- Glueck, Bernard. 1916. *Studies in Forensic Psychiatry*. Boston: Little, Brown.
- . 1918. "A Study of Six Hundred and Eight Admissions to Sing Sing Prison." *Mental Hygiene* 2:85-151.
- Glueck, Eleanor. 1927. *Community Use of Schools*. Baltimore: Williams & Wilkins.
- . 1936. *Evaluative Research in Social Work*. New York: Columbia University Press.
- . 1966. "Identification of Potential Delinquents at 2-3 Years of Age." *International Journal of Psychiatry* 12:5-16.
- Glueck, Sheldon. 1925. *Mental Disorder and the Criminal Law*. Boston: Little, Brown.
- . 1934. Letter to H. H. Bingham, October 5. Sheldon Glueck Papers. Harvard Law School Library, Cambridge, Mass.
- . 1956. "Theory and Fact in Criminology." *British Journal of Delinquency* 7:92-109.
- . 1960. "Ten Years of *Unraveling Juvenile Delinquency*: An Examination

- of Criticisms." *Journal of Criminal Law, Criminology, and Police Science* 51:283-308.
- . 1962. *Law and Psychiatry: Cold War or Entente Cordiale?* Baltimore: Johns Hopkins University Press.
- . 1964. "Remarks in Honor of William Healy, M.D." *Mental Hygiene* 48:318-22.
- Glueck, Sheldon, and Eleanor Glueck. 1930. *500 Criminal Careers*. New York: Knopf.
- . 1934a. *One Thousand Juvenile Delinquents*. Cambridge, Mass.: Harvard University Press.
- . 1934b. *Five Hundred Delinquent Women*. New York: Knopf.
- . 1937a. *Later Criminal Careers*. New York: The Commonwealth Fund.
- . 1937b. "Analysis of Prof. Sutherland's Appraisal of *Later Criminal Careers*." Sheldon Glueck Papers. Harvard Law School Library, Cambridge, Mass.
- . 1937c. Letter to Edwin Sutherland, December 14. Eleanor T. and Sheldon Glueck Joint Papers. Harvard Law School Library, Cambridge, Mass.
- . 1940. *Juvenile Delinquents Grown Up*. New York: The Commonwealth Fund.
- . 1943. *Criminal Careers in Retrospect*. New York: The Commonwealth Fund.
- . 1945. *After-Conduct of Discharged Offenders*. London: Macmillan.
- . 1950a. *Unraveling Juvenile Delinquency*. New York: The Commonwealth Fund.
- . 1950b. "Review of Sheldon's *Varieties of Delinquent Youth*." *Survey* 86:215.
- . 1951. "Note of Plans for Further 'Unraveling' Juvenile Delinquency." *Journal of Criminal Law, Criminology, and Police Science* 41:759-62.
- . 1952. *Delinquents in the Making*. New York: Harper.
- . 1956. *Physique and Delinquency*. New York: Harper.
- . 1959. *Predicting Delinquency and Crime*. Cambridge, Mass.: Harvard University Press.
- . 1962. *Family Environment and Delinquency*. London: Routledge & Kegan Paul.
- . 1964. *Ventures in Criminology*. Cambridge, Mass.: Harvard University Press.
- . 1968. *Delinquents and Nondelinquents in Perspective*. Cambridge, Mass.: Harvard University Press.
- . 1970. *Toward a Typology of Juvenile Delinquency*. New York: Grune & Stratton.
- . 1974. *Of Delinquency and Crime*. Springfield, Ill.: Thomas.
- Goff, Colin. 1986. "Criminological Appraisals of Psychiatric Explanations of Crime: 1936-1950." *International Journal of Law and Psychiatry* 9:245-60.
- Goring, Charles. (1913) 1972. *The English Convict*. Montclair, N.J.: Patterson Smith.
- Gottfredson, Michael, and Travis Hirschi. 1986. "The True Value of Lambda Would Appear to Be Zero: An Essay on Career Criminals, Criminal Careers, Selective Incapacitation, Cohort Studies, and Related Topics." *Criminology* 24:213-34.
- . 1987. "The Methodological Adequacy of Longitudinal Research." *Criminology* 25:581-614.
- . 1988. "Science, Public Policy, and the Career Paradigm." *Criminology* 26:37-55.
- . 1990. *A General Theory of Crime*. Stanford, Calif.: Stanford University Press.
- Hall, Livingston. 1937. "A Reply to Professor Sutherland's Review of *Later Criminal Careers*." *Harvard Law Review* 51:389-93.
- Healy, William. 1915. *The Individual Delinquent*. Boston: Little, Brown.
- Healy, William, and Augusta F. Bronner. 1926. *Delinquents and Criminals: Their Making and Unmaking*. New York: Macmillan.

- Hirschi, Travis. 1969. *Causes of Delinquency*. Berkeley: University of California Press.
- . 1973. "Procedural Rules and the Study of Deviant Behavior." *Social Problems* 21:159–73.
- . 1983. "Crime and the Family." Pp. 53–68 in *Crime and Public Policy*, edited by James Q. Wilson. San Francisco: Institute for Contemporary Studies.
- Hirschi, Travis, and Michael Gottfredson. 1980. "Introduction: The Sutherland Tradition in Criminology." Pp. 7–19 in *Understanding Crime*, edited by Travis Hirschi and Michael Gottfredson. Beverly Hills, Calif.: Sage.
- . 1983. "Age and the Explanation of Crime." *American Journal of Sociology* 89:552–84.
- Hirschi, Travis, and Hanan C. Selvin. 1967. *Delinquency Research: An Appraisal of Analytic Methods*. New York: Free Press.
- . 1970. "False Criteria of Causality." Pp. 127–40 in *The Sociology of Crime and Delinquency*, 2d ed. Edited by Marvin Wolfgang, Leonard Savitz, and Norman Johnston. New York: Wiley.
- Huesmann, L. Rowell, Leonard Eron, Monroe Lefkowitz, and Leopold Walder. 1984. "Stability of Aggression over Time and Generations." *Developmental Psychology* 20:1120–34.
- Jones, Robert Alun. 1977. "On Understanding a Sociological Classic." *American Journal of Sociology* 83:279–319.
- . 1986. "Durkheim, Frazer, and Smith: The Role of Analogies and Exemplars in the Development of Durkheim's Sociology of Religion." *American Journal of Sociology* 92:596–627.
- Kornhauser, Ruth Rosner. 1978. *Social Sources of Delinquency*. Chicago: University of Chicago Press.
- Laub, John H. 1983. *Criminology in the Making: An Oral History*. Boston: Northeastern University Press.
- Laub, John H., and Robert J. Sampson. 1988. "Unraveling Families and Delinquency: A Reanalysis of the Gluecks' Data." *Criminology* 26:355–80.
- Lazarsfeld, Paul F. 1955. "Interpretation of Statistical Relations as a Research Operation." Pp. 115–25 in *The Language of Social Research*, edited by Paul F. Lazarsfeld and Morris Rosenberg. New York: Free Press.
- Lindesmith, Alfred. 1947. *Opiate Addiction*. Bloomington: Indiana University Press.
- . 1988. Foreword to *The Criminology of Edwin Sutherland*, by Mark S. Gaylord and John F. Galliher. New Brunswick, N.J.: Transaction.
- Loeber, Rolf. 1982. "The Stability of Antisocial Child Behavior: A Review." *Child Development* 53:1431–46.
- Loeber, Rolf, and Magda Stouthamer-Loeber. 1986. "Family Factors as Correlates and Predictors of Juvenile Conduct Problems and Delinquency." Pp. 29–150 in *Crime and Justice: An Annual Review of Research*, vol. 7. Edited by Michael Tonry and Norval Morris. Chicago: University of Chicago Press.
- Mannheim, Hermann. 1965. *Comparative Criminology*. Boston: Houghton Mifflin.
- . 1972. *Pioneers in Criminology*, enlarged 2d ed. Montclair, N.J.: Patterson Smith.
- Matsueda, Ross L. 1988. "The Current State of Differential Association Theory." *Crime and Delinquency* 34:277–306.
- McCord, Joan. 1979. "Some Child-rearing Antecedents of Criminal Behavior in Adult Men." *Journal of Personality and Social Psychology* 37:1477–86.
- Merton, Robert. 1971. Foreword to *Masters of Sociological Thought: Ideas in Historical and Social Context*, by Lewis Coser. New York: Harcourt Brace Jovanovich.
- Michael, Jerome, and Mortimer J. Adler. 1933. *Crime, Law, and Social Science*. New York: Harcourt Brace.

- Morgan, Thomas B. 1960. "Now We Can Spot Delinquents Early." *Think Magazine*, March, pp. 2-6.
- Olweus, Daniel. 1979. "Stability of Aggressive Reaction Patterns in Males: A Review." *Psychological Bulletin* 86:852-75.
- Patterson, Gerald. 1982. *Coercive Family Process*. Eugene, Oreg.: Castalia.
- Potts, David P. 1965. "Social Ethics at Harvard, 1881-1931: A Study in Academic Activism." Pp. 91-128 in *Social Sciences at Harvard, 1860-1920*. Cambridge, Mass.: Harvard University Press.
- Reckless, Walter. 1941. "Review of the Gluecks' *Juvenile Delinquents Grown Up*." *American Journal of Sociology* 46:736-38.
- Reiss, Albert J., Jr. 1951. "Unraveling Juvenile Delinquency. II. An Appraisal of the Research Methods." *American Journal of Sociology* 57:115-20.
- Robins, Lee. 1966. *Deviant Children Grown Up*. Baltimore: Williams & Wilkins.
- Rowe, David, and D. Wayne Osgood. 1984. "Heredity and Sociological Theories of Delinquency: A Reconsideration." *American Sociological Review* 49:526-40.
- Schneider, Alexander J. N., Cyrus W. LaGrone, Jr., Eleanor T. Glueck, and Sheldon Glueck. 1944. "Prediction of Behavior of Civilian Delinquents in the Armed Forces." *Mental Hygiene* 28:456-75.
- Schuessler, Karl, ed. 1973. *Edwin H. Sutherland on Analyzing Crime*. Chicago: University of Chicago Press.
- Sellin, Thorsten. 1938. *Culture Conflict and Crime*. New York: Social Science Research Council.
- Sheldon, William H. 1949. *Varieties of Delinquent Youth: An Introduction to Constitutional Psychiatry*. New York: Harper.
- Siegel, Larry. 1989. *Criminology*, 3d ed. Minneapolis: West.
- Snodgrass, Jon. 1972. *The American Criminological Tradition: Portraits of the Men and Ideology in a Discipline*. Ann Arbor, Mich.: University Microfilms International.
- . 1973. "The Criminologist and His Criminal: Edwin H. Sutherland and Broadway Jones." *Issues in Criminology* 8:1-17.
- Sutherland, Edwin H. 1924. *Criminology*. Philadelphia: Lippincott.
- . 1929. Letter to Sheldon Glueck, September 27. Sheldon Glueck Papers. Harvard Law School Library, Cambridge, Mass.
- . 1934a. *Principles of Criminology*, 2d rev. ed. Philadelphia: Lippincott.
- . 1934b. "Review of the Gluecks' *One Thousand Juvenile Delinquents*." *Journal of Criminal Law, Criminology, and Police Science* 25:144-46.
- . 1936. Letter to Sheldon Glueck, May 4. Sheldon Glueck Papers. Harvard Law School Library, Cambridge, Mass.
- . 1937a. *The Professional Thief*. Chicago: University of Chicago Press.
- . 1937b. "Review of Gluecks' *Later Criminal Careers*." *Harvard Law Review* 51:184-86.
- . 1937c. "The Gluecks' *Later Criminal Careers*: An Appraisal by Edwin Sutherland." Eleanor T. and Sheldon Glueck Joint Papers. Harvard Law School Library, Cambridge, Mass.
- . 1937d. Letter to Sheldon Glueck, December 4. Sheldon Glueck Papers. Harvard Law School Library, Cambridge, Mass.
- . 1938. Letter to Eleanor Glueck, January 11. Sheldon Glueck Papers. Harvard Law School Library, Cambridge, Mass.
- . 1944a. "Review of Gluecks' *Criminal Careers in Retrospect*." *American Bar Association Journal* 30:142.
- . 1944b. Letter to Sheldon Glueck, February 11. Eleanor T. and Sheldon Glueck Joint Papers. Harvard Law School Library, Cambridge, Mass.
- . 1947. *Principles of Criminology*, 4th ed. Philadelphia: Lippincott.

American Journal of Sociology

- . 1949. *White Collar Crime*. New York: Dryden.
- . 1951. "Critique of Sheldon's *Varieties of Delinquent Youth*." *American Sociological Review* 16:10–13.
- . 1983. *White Collar Crime: The Uncut Version*. New Haven, Conn.: Yale University Press.
- Sutherland, Edwin H., and Donald R. Cressey. 1955. *Principles of Criminology*, 5th ed. Chicago: Lippincott.
- . 1978. *Principles of Criminology*, 10th ed. Philadelphia: Lippincott.
- Taft, Donald. 1937. "Review of Gluecks' *Later Criminal Careers*." *American Sociological Review* 2:940–41.
- Turner, Ralph. 1953. "The Quest for Universals in Sociological Research." *American Sociological Review* 24:605–11.
- Udry, J. Richard. 1988. "Biological Predispositions and Social Control in Adolescent Sexual Behavior." *American Sociological Review* 53:709–22.
- Vaillant, George E. 1980. "Glueck, Eleanor Touroff." Pp. 278–80 in *Notable American Women: The Modern Period*, edited by Barbara Sickerman and Carol Hurd Greer. Cambridge, Mass.: Harvard University Press.

Functions of Crime: A Paradoxical Process¹

Allen E. Liska

State University of New York at Albany

Barbara D. Warner

University of Kentucky

Sociologists have long been interested in the functions of deviance and crime for the social order. Following Durkheim, functionalists argue that crime or the reaction to it (punishment) brings people together, thereby building social solidarity and cohesiveness, which in turn decreases crime. Recently, theory and research on the fear of crime argue, to the contrary, that crime or the reaction to it (fear) does not bring people together; rather it constrains their social interaction, thereby undermining instead of building social solidarity and cohesiveness. Additionally, opportunity (routine-activities) theory and research suggest that constraining social interaction to safe sites and times limits the opportunities for crime. This article attempts to combine the fear-of-crime and opportunity (routine-activities) research traditions in one model. The model first examined is a recursive one in which robbery constrains social interaction that affects other crimes. Then a nonrecursive model where robbery constrains social interaction that affects both other crimes and robbery is examined. Results suggest a model in which crime becomes stabilized through a negative feedback loop, as proposed by functionalists, but through processes more akin to those proposed in routine-activities theory. As robbery increases, so does the fear of crime that constrains social interaction. Although possibly undermining social solidarity, this process constrains opportunities for crime, thereby decreasing both robbery and other crimes.

In this article, we are concerned with a long-standing issue in the sociology of deviance: the functions of deviance and crime for social life. Draw-

¹ This study was supported in part by National Institute of Aging grant AGO5R014067, and some of the data were made available by the Inter-University Consortium for Political and Social Research. We thank Pamela Jackson, Marvin Krohn, Alan Lizotte, David McDowall, Steven Messner, Charles Tittle, and the anonymous *AJS* reviewers for their helpful comments on various drafts of the article. Requests for reprints should be sent to Allen E. Liska, Department of Sociology, State University of New York, Albany, New York 12222

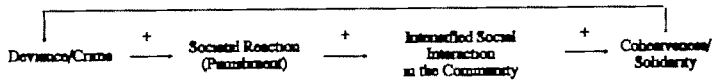
ing on the Durkheimian tradition and the more recent developments in opportunity and routine-activities theories, we model the functions of crime and deviance for social life.

Durkheim (1933, 1938) wrote on both the normality and functionality of crime in social life. He argued that, whatever the distribution or range of behavior around a social norm, some proportion of the distribution is reacted to or defined as deviant or criminal in every society and that this proportion remains relatively stable over time. He further argued that crime is a necessary and functional part of social life.

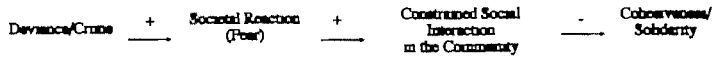
Crime is functional for society because the community's reaction to it brings the community together and strengthens its moral boundaries. A specific level of social reaction—defining or punishing a given number of actions as deviant or criminal—maintains critical social states of society, such as cohesiveness, solidarity, and clear moral boundaries, which are necessary for social order and survival. Durkheim (1933) states: "Crime brings together upright consciences and concentrates them. We have only to notice what happens, particularly in a small town, when some scandal has just been committed. They stop each other on the street, they visit each other, they seek to come together to talk of the event and to wax indignant in common" (p. 102). Erickson (1966), interpreting Durkheim's thesis on the functionality of crime, writes: "The deviant individual violates rules of conduct which the rest of the community holds in high respect; and when these people come together to express their outrage over the offense and to bear witness against the offender, they develop a tighter bond of solidarity than existed earlier. The excitement generated by the crime, in other words, quickens the tempo of interaction in the group" (p. 4).

Traditionally, the theoretical logic of how functional social states, such as a specific level of crime or societal reaction, come into being and are maintained by their consequences has been vague and somewhat teleological; that is, the logic has been couched in terms of unobservable system targets, needs, or goals. More recent explanations, however, emphasize causal feedback models (Stinchcombe 1968). Functional social states are initiated and maintained through explicit causal feedback loops, which include both positive and negative effects (control loops). An increase in any one of the variables in the loop causes changes in other variables in the loop that in turn lead to decreases in the initially changed variable, thereby maintaining functional social states and system stability. Model 1 in figure 1 assumes that deviance/crime positively affects societal reaction, generally punishment, which intensifies social interaction in the community, which positively affects solidarity/cohesiveness, which in turn negatively affects deviance/crime. For example, an

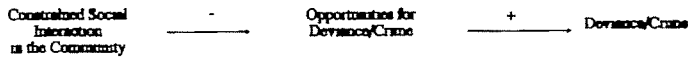
1 Functionalist Model



2 Fear of Crime Model



3 Criminal Opportunity (Routine Activities) Model



4 Fear of Crime/Criminal Opportunity (Routine Activities) Synthesis Model

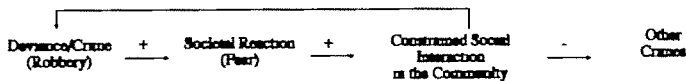


FIG. 1.—Modeling the consequences of deviance/crime for society

increase in crime, brought about by changes in various exogenous variables (e.g., unemployment), increases punishment, which intensifies social interaction in the community, which increases solidarity/cohesiveness, which in turn decreases crime. Because the causal loop consists of both positive and negative causal effects, the initial change dampens over time and the system tends toward long-term stability.

Although historical and field observation studies based on the functionalist model provide interpretative descriptions of the above social process, suggesting how reactions to crime either function to increase boundary maintenance and solidarity (Erikson 1966) or fail to do so (Ben-Yehuda 1980), actual theory-testing research is limited to a few laboratory and survey studies. For example, Lauderdale (1976), in an experimental study, shows that an external threat increases both the rejection of deviants and social solidarity, but he does not show that the rejection of deviants mediates the effect of an external threat on solidarity.

In sum, Durkheim laid the foundations for examining the functions of deviance and crime in maintaining the social order. Recently, some researchers have formulated his ideas into causal models with negative feedback loops. This body of research, however, has not provided systematic evidence that deviance or crime, directly or indirectly through the societal reaction to it, affects any social state, such as social solidarity, cohesiveness, or clear boundaries, thought to maintain the social order.

Other bodies of literature that also bear on these issues have not been examined in relation to the functionalist model. The fear-of-crime literature bears particularly on the effect of crime on the intensity of social interaction in the community. Although most of this research is at the individual rather than the societal level of analysis, its relevance for macromodels is quite clear. It suggests that crime, especially robbery, affects the fear of crime, which in turn affects behavior. Fear of crime restricts and constrains rather than intensifies social interaction in the community, thereby decreasing social solidarity and cohesiveness (Hartnagel 1979; Goodstein and Shotland 1980; Conklin 1975). People who fear crime constrain their social behavior to safe areas during safe times, avoiding unsafe areas of cities and the businesses and residences located in them; and people who are unable to avoid living in unsafe areas frequently become prisoners in their own homes, afraid to walk the streets in their own neighborhoods (Skogan and Maxfield 1981; Garofalo 1979; Clarke and Lewis 1982; Yin 1985; and Liska, Sanchirico, and Reed 1988).

Clearly, the traditional functionalist and the fear-of-crime models make very different predictions regarding the effects of deviance and crime on social interaction in the community. The functionalist model suggests that deviance and crime, either directly or indirectly through the societal reaction to it (punishment), increase (intensify) social interaction in the community and thereby build social solidarity and cohesiveness; in contrast, the fear-of-crime model suggests that deviance and crime, especially robbery, through the societal reaction to it (fear), decrease (constrain) social interaction in the community and thereby undermine social solidarity and cohesiveness.

Let us turn now to the consequences of social interaction in the community, a pivotal concept in functionalist models. Durkheim (1933, pp. 102-3; 1938) argued that social interaction in the community reinforces common values and the common consciousness, which, through processes of socialization and social control, reduce criminal motivation, thereby reducing crime. Within the functionalist tradition, empirical support for this proposition, too, is mixed, weak, and indirect (Fischer 1975; Crutchfield, Geerken, and Gove 1982; South 1987).

Criminal-opportunity theory also addresses the consequences of social interaction on crime but, like the fear-of-crime theory it also has not been examined in relation to the functionalist model. Opportunity theory suggests that offenders make rational choices and thus choose targets that offer a high reward with little effort and risk. A large part of this theory focuses on how variations in life-style or routine activities affect the opportunities for crime (Hindelang, Gottfredson, and Garofalo 1978; Cohen and Felson 1979; Cohen, Felson, and Land 1980). Routine activities are assumed to influence crime rates by affecting the convergence in time and space of the three elements necessary for a crime to occur: motivated offenders, suitable targets, and the absence of capable guardians. Because it assumes there is an ample supply of motivated offenders, this research focuses on the supply of suitable targets and capable guardians. Opportunity theory argues that when routine activities are constrained to the home, the home becomes a secure environment. People become guardians of it, of its possessions, and of each other. The dispersion of routine activities away from the home provides a supply of suitable targets that lack capable guardians.

Hindelang et al. (1978) were among the first to develop this idea under the rubric of life-style. They report that the high victimization rates of certain social categories, for example, young males, can be explained by their life-style, that is, by the fact that a high proportion of their activities take place away from home and during the night. Cohen and Felson (1979) develop this idea to explain trends in crime rates. They argue that changes in routine activities in recent years (e.g., away-from-home travel, single-person households, and labor-force participation of both spouses) leave a high percentage of homes unattended during the day and night and place people in relatively unguarded environments. They report that this dispersion of routine activities away from the home is positively related to rates of index crimes in the United States over the last century. Cohen et al. (1980), Cohen, Kluegal, and Land (1981), and Cook (1986) further develop this framework within a general opportunity theory of crime by showing how the life-style or routine activities of people alter the opportunity structure of crime, thereby explicitly showing how it influences crime. Considerable supporting research has appeared in the most recent literature (e.g., Miethe, Stafford, and Long 1987; and Messner and Blau 1987).

In general, this research suggests that intensified social interaction in the community decreases the guardianship of the home and thereby increases the likelihood of crimes against the home, such as burglary, and crimes against people, such as larceny, assault, rape, and robbery (fig. 1, model 3).

Although both the traditional functionalist model and the opportunity (routine-activities) model suggest a stabilizing process, they make very different predictions regarding the effects of social interaction in the community on deviance and crime. The functionalist model suggests that social interaction in the community increases social solidarity and cohesiveness, which in turn decrease deviance and crime, and the opportunity model suggests that social interaction in the community increases the opportunities for deviance and crime, which in turn increase deviance and crime.

In sum, drawing on Durkheim, functionalists have examined the functions of deviance and crime for building the social order. Recently, some have built causal feedback models that assume that deviance and crime, either directly or indirectly through the reaction to crime (punishment), increase (intensify) social interaction in the community, which strengthens social cohesiveness, solidarity, and moral boundaries, which in turn decrease deviance and crime. While providing interpretative accounts of historical instances of this process, research in this tradition provides few tests of it.

We have reviewed two areas of research outside of the functionalist tradition that question the existence of such a process in contemporary urban societies. Fear-of-crime research suggests that crime decreases (constrains) social interaction in the community, thereby undermining solidarity and cohesiveness, and opportunity (routine-activities) research suggests that constrained social interaction in the community decreases the opportunities for deviance and crime, thereby decreasing deviance and crime. Drawing on these two research literatures, we formulate a model (fig. 1, model 4) that suggests that some deviance/crime, especially robbery, increases the fear of crime, which constrains social interaction in the community, and that constrained social interaction decreases these and other patterns of deviance/crime.

Our research examines this model, particularly three segments: (1) the extent to which some crimes, especially robbery, increase the fear of crime; (2) the extent to which the fear of crime affects (constrains) social interaction in the community; and (3) the extent to which constrained social interaction in the community in turn affects (increases or decreases) these and other crimes. Because no direct measures of either social solidarity/cohesiveness or opportunities for crime are available, this research cannot provide direct and crucial tests of the full models in figure 1. However, because the functionalist model suggests a negative relationship between social interaction in the community and crime and because the opportunity (routine-activities) model suggests a positive relationship between social interaction in the community and crime, this research does provide indirect and comparative tests of both models.

PROCEDURES

Sample

The sample is composed of the 26 cities of the National Crime Survey (NCS), sponsored by the National Institute of Justice and directed by the Bureau of the Census. While these are the only cities for which data on both the fear of crime and constrained social interaction in the community are available, they include the largest cities in the United States and about one-sixth of the U.S. population. The NCS sampled about 10,000 households and interviewed about 20,000 respondents ages 12 or older from each of the 26 cities during 1973 and 1974. Approximately one-half of the respondents who were ages 16 or older were asked a battery of questions related to crime and victimization, including questions about the fear of crime and about social interaction inside and outside of the home.

Measures

Social interaction in the community is measured by two self-report items: "How often do you go out in the evening for entertainment, such as to restaurants, theaters, etc.?" (The answers were "once a week or more," "less than once a week but more than once a month," "about once a month," "two or three times a year.") "In general have you limited or changed your activities in the past few years because of crime?" (The answers were no and yes.) Both items vary considerably among the cities and are scored as the degree of constrained social interaction (CSI).

Societal reaction to crime (fear) is measured by two items: "How safe do you feel or would you feel out alone in your neighborhood at night (day)?" (The answers were, "very safe," "reasonably safe," "somewhat safe," "very unsafe.") The percentage of respondents feeling very unsafe during the day varies from 0.4% to 5.3% with a mean of 2.4%, and the percentage of respondents feeling very unsafe during the night varies from 11.9% to 32.1% with a mean of 21%. Fear of crime in large cities is clearly a nighttime phenomenon that varies considerably from city to city. While the absolute levels of fear change considerably from night to day, the correlation of nighttime and daytime fear is very high ($r = .91$).

To measure city crime rates, we can use either the Uniform Crime Reports (UCR) or the NCS data. Perhaps the most basic difference between them is that the UCR is a measure of crimes reported to the police and the NCS is a measure of all crimes, regardless of whether they have been reported to the police. Cohen and Land's (1984) work empirically supports this distinction. They report that, when variables that can be assumed to affect the reporting of crime are controlled, the UCR and

NCS rates of most serious crimes (auto theft, robbery, burglary, and even rape) tend to converge. (Also see Gove, Hughes, and Geerken 1985.) The general theoretical question for deciding which data to use in this study is clear: Is fear of crime a response to the underlying crime rate as reflected in personal victimization and the victimization of friends and associates (communicated through interpersonal ties) or to the reported crime rate as reflected in the victimization of strangers (communicated through the media)? While there is some evidence for each process, research suggests that the first is the major process (Graber 1980; Garofalo 1981; Skogan and Maxfield 1981). Hence, we select the NCS as the primary data source and use the UCR for validity checks at various stages of the analysis. Crime rates are computed on all serious crime directed at individuals or their property (rape, assault, robbery, burglary, larceny, and auto theft) except homicide, arson, and kidnapping, which are not available in the NCS.

We include other variables that theory and research suggest either affect two or more of the theoretical variables in the model and thus should be controlled in estimating the model or affect only one variable in the model and thus can be used as instruments in identifying the model. Although it is not easy to decide what other variables to include, general theories of crime suggest that economic structure, racial composition, age composition, family structure, population size, and geographical region affect both robbery and other crimes (e.g., Blau and Blau 1982; and Land, McCall, and Cohen 1990), and some research suggests that some of these variables also affect the fear of crime (e.g., Liska, Lawrence, and Sanchirico 1982).

One or more measures of each of these concepts is examined. We include two dimensions of economic structure (income inequality and poverty). Income inequality is measured by the Gini index, which expresses the average differences in income between all pairs of individuals in the city relative to the average income of the city (1970 census). Poverty is measured by both mean family income and the percentage of families below the poverty line ($r = -.73$). The former is computed from a self-report item in the NCS, and the latter is taken from the 1970 census. Racial composition is measured as the percentage of nonwhites and is taken from the 1970 census. Age composition is measured as the percentage of the population between age 15–19 and age 15–24 and is taken from the census. Family structure is measured as the percentage of heads of households that are married and is computed from the NCS. Population size is taken from the census (1970, 1975). Geographical region is measured by whether or not a city is located in the South.

Additionally, population density and crime coverage in the media are included as instrumental variables in the analysis. (The theoretical justi-

fication is discussed in "Results" below.) Density is measured as the ratio of the population to the square miles of a city (1970 census). As a measure of crime in the media, we analyze crime articles in the largest circulating daily newspaper in each of the 26 cities. Twenty-five editions of the leading newspaper from each city were selected randomly from a sampling frame of 365 days preceding the quarter in which the NCS data were collected in that city. Each newspaper was coded for the total number of crime articles in the first 15 pages and in the total newspaper, for the total number of specific crime articles (e.g., homicide, rape, and assault), and for the total number of multiple crime stories (e.g., rape and homicide); and each crime article was coded as local or nonlocal.

Data Analysis

The data analysis is sensitive to three issues: the sample size is limited; the measures of CSI are incomplete; and the validity of the NCS measures of some crimes is problematic.

While a small sample is not necessarily a problem, it poses two problems for this particular research. It limits the number of causal variables whose effects can be simultaneously estimated, and maximum-likelihood (ML) methods, typically used to estimate structural-measurement models, are sensitive to sample size (i.e., while asymptotically unbiased, the properties of small-sample ML estimates are not well known). The issue of small sample size was addressed in two ways. Through a series of preliminary analyses, we located those causal variables that have the most effect and included only them in the structural model. Additionally, we estimated the structural-measurement models by using both ML and least squares methods. Least squares estimates are less sensitive to sample size than are ML estimates (Long 1983). Following tradition, we report ML estimates in tables 1 and 2 and note any discrepancies between ML and LS estimates.

The second issue concerns the measure of CSI. The first item refers to only nighttime activities, and the second item, which includes both daytime and nighttime activities, refers to activities that have been either limited or changed because of crime. While these items operationalize part of the meaning of CSI, they constitute an imperfect measure. One item leaves out some activities that should be included (daytime activities), and the other includes some activities that should be excluded (changed activities). Ideally, we should include both daytime and nighttime activities and only activities that are limited, not changed, because of crime. However, the issue is not whether the measure is perfect but whether the error is systematic. That is, does it substantially change the measured covariance with other variables in the model? To be specific,

is covariance with other variables in the model substantially different for constrained daytime activities than for nighttime ones and for changed activities than for limited ones?

We have no reason to believe this and considerable reason to doubt it. The measure of fear of crime includes two items (fear during the night and fear during the day) that might be expected to correlate with measures of constrained social interaction. Aggregated to the city level, they correlate .91 and both are highly correlated (ranging from .73 to .94) with both CSI items. Hence, we have every reason to believe that the measurement error is predominantly random, the net effect of which is to bias standardized estimates of the structural model downward. We address this problem analytically in a measurement model whereby we adjust for the measurement error (the specific or unique variance in each item) in estimating the structural model.

The third issue concerns various questions that have been raised over the years about measurement error in the NCS data. Most of these are problems typical of surveys, such as memory loss and interviewer bias, and many do not vary by city. For example, the amount of crime reported is certainly affected by how much interviewers probe the respondents, but there is little evidence that the degree of probing varies by city. Thus, when the data are aggregated to the city level these errors do not bias estimates of structural equations.² One important question involves the low positive correlation between the NCS and UCR measures of rape and the negative correlation between the two measures of assault. While some differences between the NCS and UCR measures should be expected because they measure somewhat different things, the correlations for these crimes should be at least as moderately positive, or even as strongly positive, as they are for the other index crimes (see, e.g., Clarren and Schwartz 1976; Booth, Johnson, and Choldin 1977; Cohen and Lichbach 1982; Decker, Shichor, and O'Brien 1982; Cohen and Land 1984).³ To examine the extent to which estimates of the structural equations are sensitive to errors in the NCS measures of rape and assault, we estimate the structural equations with and without the NCS measures of rape and assault and we estimate the structural equations with the substitution of the UCR measures of assault and rape for the NCS measures.

² Even the sources of error that do vary by city are often random relative to the causal variables in the model.

³ These studies examine this covariance over some or all of the 26 cities for different crimes. (See Gove et al. [1985] for a review.) The findings are very consistent. The correlations for robbery, burglary, and auto theft are consistently very high; the correlations for larceny are consistently moderate; the correlations for rape are low, and the correlations for assault are negative. Hence, by the criterion of convergence, the validity of UCR and NCS is in question only for rape and assault.

The results are presented in two main sections. Preliminary analyses first establish both the causal structure among the crime rates and the measurement structure. Causal structural analyses, then, estimate both a series of recursive structural models and more complex nonrecursive structural models.

RESULTS

Preliminary Analyses

Because the sample is small, not all of the crime rates can be examined simultaneously. Thus, we first examine the extent to which fear is related to different types of crime. The index of fear (fear during the day and night) is regressed on the five different crime rates. The findings show that only robbery is positively and substantially related to it. This is very apparent in even the simple correlations. The index of fear correlates .60 with robbery, $-.34$ with rape, $-.51$ with assault, $-.57$ with individual theft, and $-.50$ with household theft. This relationship is equally apparent in various regressions. When we do a stepwise regression, robbery enters early and maintains its positive and substantial relationship with fear when the other crime rates are entered. These results are similar to those reported in the literature (Garofalo 1979; Liska et al. 1982). (When UCR rates are used, the findings for robbery are similar.)

As is true with extant research, these preliminary findings suggest that crime is not causally homogeneous. Some crimes may cause fear and thereby constrain social interaction, and some crimes may be a consequence of fear and constrained social interaction. The positive relationship between robbery and fear suggests that robbery increases fear and thereby constrains social interaction. Some researchers (Garofalo 1979; Liska et al. 1982) suggest that this occurs because robbery is a violent and unpredictable crime committed by strangers and that these are the crime characteristics that induce fear. The negative relationship between the other crime rates and fear suggests that these crimes may be consequences, not causes, of both fear and constrained social interaction. Such negative relationships are anticipated by opportunity (routine-activities) theory. It suggests that when people remain in their homes they function as guardians of their homes (Cohen and Felson 1979; Messner and Blau 1987), which reduces burglary and household theft, and, by placing themselves in a relatively secure environment, they reduce individual theft and possibly assault and rape as well.

Rather than estimate separate structural equations for each of the four other crimes (rape, assault, household theft, and individual theft), we treat them as indicators of a latent variable, "other crimes." Their corre-

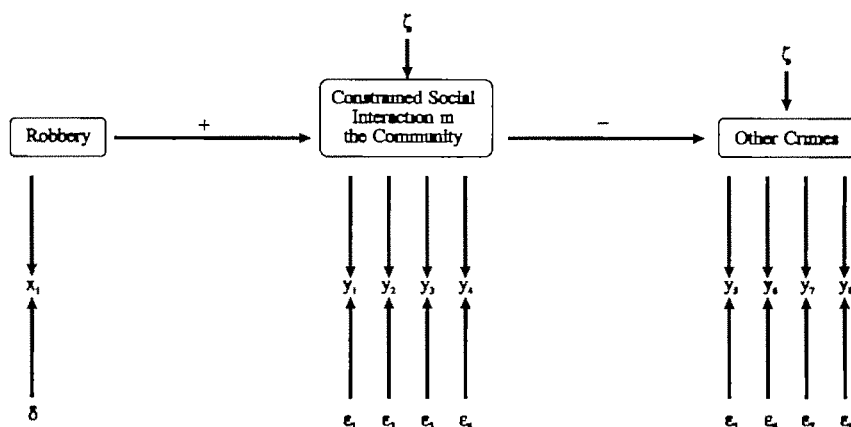


FIG. 2.—Recursive structural measurement model

lation of between .74 and .91 indicates that this is a reasonable way to proceed.

Accordingly, we develop a structural-measurement model consisting of four latent variables: robbery, other crimes, fear of crime, and constrained social interaction in the community. We conceptualize fear as a latent variable measured by fear during the day and fear during the night, and we conceptualize constrained social interaction as a latent variable measured by self-reports of social interaction during the evening and self-reports of changed or limited social interaction because of crime. When we allow the four latent variables to correlate, estimates of this measurement model show that fear of crime and constrained social interaction in the community are highly correlated, which supports the fear-of-crime/opportunity (routine-activities) model (fig. 1, models 2, 3, and 4). These two latent concepts correlate at .88, and the four measures of them correlate at between .73 and .94. Indeed, because they are so highly correlated we treat them as indicators of the same latent concept, herein referred to as CSI. This reconceptualization yields a structural-measurement model in which robbery increases constrained social interaction as measured by four indicators, which in turn decreases other crimes as measured by four indicators (fig. 2).

Causal Structural Analyses

The causal structural analyses are divided into two parts. First, we estimate a simple recursive model and examine the extent to which it can account for the observed correlations between robbery, CSI, and the other crimes. This allows us to establish a base from which to evaluate

estimates of the more complex models. We then progressively complicate the basic recursive model by allowing error terms in the measurement and structural models to correlate and by including various exogenous causal variables. This allows us to observe how sensitive estimates of the basic recursive model are to the exclusion of other variables. Second, we estimate a nonrecursive causal model and observe how sensitive the estimates are to different model specifications.

Recursive Structural-Measurements Model

We begin with the basic recursive structural-measurement model in which robbery affects CSI and CSI affects other crimes, where no correlated error in either the structural or measurement models is assumed, and where no other causal variables are included. Estimates of this simple model provides a reference point from which to compare estimates of more complex models. The estimates (robbery beta = .45; CSI beta = -.72) provide a reasonably good fit to the data, yielding R^2 s of .29 and .43 for the CSI and other crimes equations, respectively, and a χ^2/df ratio of 1.81 (table 1, model 1). The strong positive effect of robbery on CSI supports the fear-of-crime hypothesis, and the strong negative effect of CSI on other crimes supports the routine-activities hypothesis that social conditions that confine people to their homes decrease personal and household crime.

To examine the extent to which these estimates of the structural model may be biased because of measurement error in assault and rape, we reestimate the basic model. First we delete NCS rape, then NCS assault, and then both NCS rape and assault; and, second, we substitute UCR rape for NCS rape, UCR assault for NCS assault, and then both UCR rape and assault for NCS rape and assault. The results are clear and straightforward. Deleting either or both NCS rape and assault from the measurement model or substituting either or both UCR rape and assault for NCS rape and assault does not change estimates of the structural model. In sum, while unique measurement error weakens the correlations between NCS and UCR measures of rape and assault, when these NCS measures are part of a multiple index measurement model, as is the case in our research design, the measurement error need not bias estimates of the structural parameters of the model.⁴

⁴ Differences between the measurement errors of NCS and UCR rape and assault are reflected in differences between the measurement coefficients, not the structural ones, of the model. Using UCR measures does yield lower R^2 s for both rape and assault and a slightly higher χ^2 for the model, perhaps reflecting more error in the UCR than in the NCS measures.

To examine the stability of the model estimates, we systematically allow various error terms to correlate. On examining the residual (error) correlation matrix that falls out of the estimates of the basic model, we allow specific error terms in the measurement model to correlate. First, we free the correlations between specific error terms of the indicators of the same latent concepts; second, we free the correlations between specific error terms of the indicators of different latent concepts; and, third, we free the correlations between specific error terms of the indicators of both the same and different latent concepts. While χ^2 's and χ^2/df ratios of the models progressively decrease, the decreases are not statistically significant, except in a very few cases, and the structural parameters remain remarkably stable.

For further observation of the stability of the estimates, we include in the model eight exogenous variables (poverty, income inequality, percentage nonwhite, percentage age 15–19, percentage age 15–24, percentage married, population size, and region) that research suggests may affect two or more of the basic model variables (robbery, CSI, and other crimes). Because the sample size is small, yielding few degrees of freedom, we enter these exogenous variables first one at a time and then in various combinations of two at a time, which allows each to affect all three of the basic model variables.

Over the course of these analyses, two of the variables consistently affect two of the three variables of the basic model (percentage nonwhite affects robbery and CSI and poverty affects CSI and other crimes), and the other variables affect only one of the three variables of the basic model (e.g., income inequality affects robbery). However, inclusion of any of the other variables does not significantly alter the estimates of the effect of robbery on CSI or the effect of CSI on other crimes. Estimates of the robbery effect remain statistically significant and vary from a beta of .32 to one of .60, depending on the combination of other variables included, and estimates of the CSI effect also remain statistically significant and vary from $-.42$ to $-.73$, depending on the combination of other variables included. Nonetheless, we revise the basic model to allow poverty to affect both CSI and other crimes and to allow percentage nonwhite to affect both robbery and CSI because these effects are reasonably consistent over different analyses. For the revised model, estimates of the robbery effect on CSI and the CSI effect on other crimes are .40 and $-.48$, respectively (table 1, model 2).

Finally, assuming that some variables that are not part of our data set may affect two or more of the three endogenous variables of the revised model, we examined the residual (error) matrix that falls out of estimates of the structural models. It shows a substantial positive correlation ($r = .38$) between robbery and other crimes, which suggests that some vari-

TABLE 1
RECURSIVE STRUCTURAL MODELS (Standardized ML Estimates)

INDEPENDENT VARIABLES	MODELS WITH CONTROLS											
	BASIC MODEL (Model 1)				Model 2				Model 3			
	Rob	CSI	OC		Rob	CSI	OC		Rob	CSI	OC	
Rob....	..	.45 ^a	...		...	.40 ^a	...		...	.40 ^a	...	
CSI.....	-.72 ^a		...	...	-.48 ^a		...	...	-.89 ^a	
% Nonwhite22 ^c	.30 ^a	..		.21 ^c	.30 ^a	..	
Poverty38 ^a	-.33 ^b		...	.37 ^a	-.02	
R ²29	.43		.05	.78	.53		.04	.78	.40	
χ^2/df		1.81				2.00				1.92		

NOTE.—Rob = robbery, CSI = constrained social interaction, OC = other crimes (rape, assault, personal theft, and household theft)

^a Beta > 2 times SE.

^b Beta > 1.5 times SE.

^c Beta > 1.0 times SE.

ables not in our data set may well affect robbery and other crimes and may thus obscure the indirect effect of robbery on other crimes as mediated through CSI. We therefore reestimate the above revised model by allowing these two error terms to correlate. This yields two changes in the parameter estimates. The poverty effect on other crimes decreases to approximately zero, and the effect of CSI on other crimes increases from $-.48$ to $-.89$ (table 1, model 3). Trimming the path from poverty to other crimes, we again reestimate the model. Estimates of this model (table 1, model 4), which are similar to those of the previous model, show that CSI strongly decreases other crimes and that robbery increases CSI, thereby indirectly decreasing other crimes.⁵

In sum, estimates of the basic recursive model show that robbery strongly and positively affects CSI, which strongly and negatively affects other crimes. This pattern of findings emerges consistently when errors in the measurement model are allowed to correlate, when other causal variables are included in the model, and when errors in the structural model are allowed to correlate.

Nonrecursive Structural-Measurement Model

Theory and our empirical findings suggest a reciprocal effect between robbery and CSI; that is, if CSI reduces other crimes, it may also reduce robbery. This effect, however, may be obscured in OLS estimates by the strong positive effect of robbery on CSI.

Locating instruments to identify reciprocal effects can be a problem in the social sciences. Because theory is not well developed, it is difficult to hypothesize with certainty that a variable affects one endogenous variable but not another and, at the same time, is not affected by the endogenous variables. Yet, in many cases reasonable assumptions can be made that are consistent with both theory and research. In this case we feel that population density (population per square mile) constitutes a good instrument for robbery. Density has a long history as a salient variable in the urbanization process and has been repeatedly hypothesized to affect deviance and crime (see Wirth 1938; Fischer 1975). Fischer, in fact, argues that density is the primary variable that accounts for urban unconventionality. Recent ecological studies report significant relationships between both UCR and NCS measures of crime and population density (Harries 1974; Wilson and Boland 1976; Decker et al. 1982). On the other

⁵ While the LS estimates differ somewhat from the ML estimates, the pattern of ML and LS estimates is very similar.

TABLE 2
NONRECURSIVE STRUCTURAL MODEL (Standardized ML Estimates)

Independent Variables	Rob	CSI	OC
Rob....	..	.39 ^a	...
CSI.....	-.63 ^a	..	-.99 ^a
% Nonwhite .....	.36 ^a	.27 ^a	...
Density... ..	.96 ^a	...	..
Media.....	..	.22 ^a	..
Poverty .....	..	.42 ^a	...
R ² .....	.30	.84	.33
χ^2/df		1.84	

NOTE.—Rob = robbery, CSI = constrained social interaction; OC = other crimes (rape, assault, personal theft, household theft)

^a Beta > 2 times SE.

hand, we know of no theoretical or empirical support for population density's affecting fear or CSI, except of course through its effect on crime.

We also feel that a good case can be made that the newspaper coverage of homicide constitutes an instrument for CSI. Theory and research generally suggest that crime coverage in the media affects the fear of crime and constrains social interaction through that fear (Graber 1980; Heath 1984). Liska and Baccaglini (1990) show that the newspaper coverage of homicide, but not the coverage of other crimes, substantially affects the fear of crime, one of the two components of the CSI measure. They also show that homicide coverage is not affected by fear, robbery rates, or other crime rates, nor does it in turn affect robbery and other crime rates.

Now, consider an extension of model 4 in table 1 that allows CSI and robbery to affect each other, using population density as an instrument for robbery and using media coverage as an instrument for CSI. To obtain statistically efficient estimates, we estimate the model, using full information maximum-likelihood methods. The estimates (table 2) are as follows. The media coverage effect on CSI and the population density effect on robbery are positive as hypothesized, the percentage nonwhite effects on robbery and CSI are similar to those reported in table 1; the robbery effect on CSI and the CSI effect on other crimes are also similar to those reported in table 1; and the effect of CSI on robbery is negative, which is similar to the effect of CSI on other crimes. It seems that CSI negatively affects both other crimes and robbery. Generally, the model provides a reasonably good fit to the data, yielding a χ^2 ratio of 1.84.

To examine how sensitive these estimates are to our specification of

the model, we also estimate various respecifications. First, because our analyses (reported in table 1) show that poverty has little effect on other crimes, the poverty path was trimmed from the final recursive model (table 1, model 4) and therefore not included in the nonrecursive model. However, because some research suggests that poverty does affect crime, we estimate three respecifications of the model in table 2, one in which poverty affects CSI and other crimes, one in which it affects CSI and robbery, and one in which it affects CSI, robbery, and other crimes. Second, because the sample size is limited, we also estimate the model with both poverty and percentage nonwhite deleted. All of these respecifications yield estimates very similar to those in table 2 and reveal exactly the same causal structure as is revealed by the estimates in table 2.

To examine the extent to which these estimates of the structural model may be biased owing to measurement error in the assault and rape *variables*, we again reestimate the model, first deleting rape, then, deleting assault, and then deleting both rape and assault, and, second, substituting UCR rape for NCS rape, substituting UCR assault for NCS assault, and then substituting both UCR rape and assault for NCS rape and assault. As in the most basic model, when we delete NCS rape and assault or substitute UCR rape and assault for NCS rape and assault, there is little change in the estimates of the structural parameters of the model.

In sum, the estimates of the nonrecursive model are relatively insensitive to various specifications in which the specific control variables are changed, and different structural and measurement error terms are allowed to correlate, and insensitive to whether NCS or UCR measures of rape and assault are used in the measurement model. It seems that CSI negatively affects robbery as well as other crimes. The negative effect on the other crimes can also be observed in the OLS estimates because other crimes have little effect on CSI, but the negative effect of CSI on robbery cannot be observed in OLS estimates because of the strong positive effect of robbery on CSI. When we control for this effect in the simultaneous equation estimates, the negative effect of CSI on robbery is also clearly evident.

We also consider a second nonrecursive model that allows for a reciprocal effect between other crimes and CSI. Perhaps the strong negative effect of CSI on other crimes obscures a weak effect of other crimes on CSI in OLS estimates. To identify the equations, we again used density as an instrument for crime (other crimes) and media coverage of homicide as an instrument for CSI. The estimates are neither consistent nor robust but depend on the model specification, that is, on what control variables we include and what error terms we allow to correlate. Hence, we find little empirical support for a causal effect of other crimes on CSI.

SUMMARY OF RESULTS

Drawing on correlations and regressions of fear and CSI on five index crimes, we first formulate a model where some crimes (e.g., robbery) positively affect fear, which constrains social interaction in the community, which in turn negatively affects other crimes. Very high correlations between the indicators of fear and constrained social behavior and between the indicators of the other crimes suggest a structural-measurement model in which robbery positively affects CSI as measured by indicators of both fear and constrained social behavior, which negatively affect other crimes as measured by four indicators. Estimates of the two structural parameters of this recursive model are remarkably stable when we substitute UCR measures for NCS measures of rape and assault, when we allow different measurement and structural error terms to correlate, and when we enter different combinations of exogenous variables into the model. Finally, we estimate two nonrecursive models: one that specifies a reciprocal effect between robbery and CSI and one that specifies a reciprocal effect between other crimes and CSI. While providing no support for the latter model, our analysis provides strong support for the former one and shows that the reciprocal effects between robbery and CSI are insensitive to different measures of crime and various model specifications. Generally, our findings show that some crimes (e.g., robbery) constrain social interaction in the community, which in turn reduces both other crimes and robbery.

These results, of course, must be viewed with some caution for two reasons. First, although the 26 cities include all of the large U.S. cities and about one-sixth of the U.S. population, the number of sampling units is relatively small. This small sample makes statistical significance difficult to achieve; however, we have retained in the models only those variables that consistently achieve conventional levels of statistical significance. The small sample also limits the number of causal variables that can be simultaneously included in an estimation equation; however, we have estimated the effects of different combinations of exogenous causal variables, and the estimated parameters are remarkably stable across different models in which we allow or do not allow the error terms to correlate. The small sample also raises questions about the properties of the ML estimates; however, we have supplemented them with LS estimates, thereby building our confidence in the estimates.

Second, the study measures the reaction to crime as fear and as constrained social interaction in the community. As we already mentioned, the measure of the latter is more limited than we prefer; however, while it is not ideal, we have no reason to believe that it includes systematic measurement error. Indeed, the strong relationship between the measures of CSI and fear of crime suggests that the measurement error is predomi-

nately random. We address this issue through a measurement model that adjusts estimates of the structural model for random measurement error.

DISCUSSION

Durkheimians have long argued that crime is functional for societies. Crime or the reaction to it (punishment) brings righteous people together to "wax indignant," thereby building social solidarity and cohesiveness, which in turn decreases crime. They describe a system of relationships between crime, societal reaction, and social solidarity/cohesiveness that tends toward long-term stability (see fig. 1, model 1). While this idea has been appealing to sociologists, the extant literature provides mostly interpretative accounts of historical instances rather than systematic tests of the model. Recent theory and research on the fear of crime has argued to the contrary that crime or the reaction to it (fear) does not bring people together. Instead, it constrains their social interaction to private places, making many of them prisoners in their own homes, thereby undermining rather than building social solidarity and cohesiveness.

Clearly, Durkheim was referring to rural and highly cohesive societies with low crime rates. In these societies the reaction to crime (punishment) may well bring people together to wax indignant and thus to reaffirm their common values, thereby building social solidarity and cohesiveness, decreasing crime, and maintaining stability over time. On the other hand, in urban societies, where crime rates are generally high, the reaction to crime (fear) may keep people apart. This may undermine social solidarity/social cohesiveness, which in turn may increase crime, or this may limit the opportunities for crime, which in turn may decrease crime. Our analysis suggests that in the contemporary urban United States, the latter process is dominant.

These findings seem to be best explained within a general routine-activities framework that may be conceptualized as part of an emerging opportunity theory of crime (Cohen, Felson, and Land 1980; Cohen, Kluegel, and Land 1981; Cook 1986). Assuming that there is a constant motivation to commit crime, opportunity theorists argue that variation in the opportunity to commit crime explains much of the variation in crime. Routine-activities theory and research suggest that the organization of contemporary society, particularly the organization of work and the family, disperses activities away from the home, increasing the supply of targets (particularly households) that lack capable guardians, thereby increasing the opportunities for crime, which in turn increases crime. Cook (1986) suggests not only that routine activities influence crime but also that crime influences routine activities, that is, that a reciprocal causal process underlies the relationships between them. Extending this

theory, we examine empirically how some crimes (e.g., robbery) in contemporary urban societies intensify fear, which constrains routine activities to the home, which in turn decreases these and other crimes.

Thus, we propose a model for contemporary urban societies that suggests a stabilizing process, as proposed by functionalists, but with different, if not contrary, processes than those they proposed. That is, in contemporary urban societies, where crime rates are generally high, the reaction to crime, instead of bringing people together, keeps them apart. While undermining community social solidarity, this process also constrains opportunities for crime, thereby decreasing crime. We therefore conclude with a somewhat paradoxical view of crime in contemporary urban societies. On the one hand, certain crimes seem to increase fear and constrain social interaction in the community; on the other, because of this effect, these and other crimes seem to decrease. Because it constrains routine activities to the home, the fear of crime, as a reaction to crime, may indeed function to control crime.

REFERENCES

- Ben-Yehuda, Nachman. 1980. "The European Witch Craze of the 14th to 17th Centuries: A Sociologist's Perspective." *American Journal of Sociology* 86:1-31.
- Blau, Judith R., and Peter M. Blau. 1982. "The Cost of Inequality: Metropolitan Structure and Violent Crime." *American Sociological Review* 47:114-29.
- Booth, Alan, David Johnson, and Harvey Choldin. 1977. "Correlates of the City Crime Rate: Victimization Surveys versus Official Statistics." *Social Problems* 25:187-89.
- Clarke, Alan, and Margaret J. Lewis. 1982. "Fear of Crime among the Elderly: An Exploratory Study." *British Journal of Criminology* 22:49-62.
- Clarren, Sumner N., and Alfred I. Schwartz. 1976. "Measuring a Program's Impact: A Cautionary Note." Pp. 121-34 in *Sample Surveys of the Victims of Crime*, edited by Wesley Skogan. Cambridge, Mass.: Ballinger.
- Cohen, Larry J., and Mark I. Lichbach. 1982. "Alternative Measures of Crime: A Statistical Evaluation." *Sociological Quarterly* 23:253-66.
- Cohen, Lawrence E., and Marcus Felson. 1979. "Social Change and Crime Rate Trends: A Routine Activities Approach." *American Sociological Review* 44:588-608.
- Cohen, Lawrence E., Marcus Felson, and Kenneth Land. 1980. "Property Crime Rates in the United States: A Macrodynamic Analysis, 1947-1977; with Ex Ante Forecasts for the Mid-1980s." *American Journal of Sociology* 86:90-118.
- Cohen, Lawrence E., James R. Kluegel, and Kenneth C. Land. 1981. "Social Inequality and Predatory Criminal Victimization: An Exposition and Test of a Formal Theory." *American Sociological Review* 46:505-24.
- Cohen, Lawrence E., and Kenneth Land. 1984. "Discrepancies between Crime Reports and Crime Surveys: Urban Social Structural Determinants." *Criminology* 22 499-530.
- Conklin, John E. 1975. *The Impact of Crime*. New York: Macmillan.
- Cook, Phillip J. 1986. "The Demand and Supply of Criminal Opportunities." Pp. 1-27 in *Crime and Justice: An Annual Review of Research*, edited by Michael Tonry and Norval Morris. Chicago: University of Chicago Press.
- Crutchfield, Robert D., Michael R. Geerken, and Walter R. Gove. 1982. "Crime

- Rate and Social Integration: The Impact of Metropolitan Mobility." *Criminology* 20:467-78.
- Decker, David L., David Shichor, and Robert M. O'Brien. 1982. *Urban Structures and Victimization*. Lexington, Mass. Heath.
- Durkheim, Émile. 1933 *The Division of Labor in Society*, translated by George Simpson. New York: Free Press.
- . 1938. *The Rules of Sociological Method*, translated by Sarah A. Solovay and John H. Mueller. New York: Free Press.
- Erickson, Kai. 1966. *Wayward Puritans*. New York: Wiley.
- Fischer, Claude S. 1975. "Toward a Subcultural Theory of Urbanism." *American Journal of Sociology* 80:1319-41.
- Garofalo, James. 1979. "Victimization and the Fear of Crime." *Journal of Research in Crime and Delinquency* 16:80-97.
- . 1981. "Crime and the Mass Media: A Selective Review of Research." *Journal of Research in Crime and Delinquency* 18:319-50.
- Goodstein, Lynne, and R. Lance Shotland. 1980. "The Fear Causes Crime Model: A Critical Review of the Relationship between Fear of Crime, Bystander Surveillance and Changes in the Crime Rate." *Victimology* 5:133-51.
- Gove, Walter R., Michael Hughes, and Michael Geerken. 1985. "Are Uniform Crime Reports a Valid Indicator of the Index Crime? An Affirmative Answer with Minor Qualifications." *Criminology* 23:451-501.
- Graber, D. A. 1980. *Crime News and the Public*. New York: Praeger.
- Harries, K. D. 1974. *The Geography of Crime and Justice*. New York: McGraw-Hill.
- Hartnagel, T. F. 1979. "The Perception and Fear of Crime: Implications for Neighborhood Cohesion, Social Activity and Community Affect." *Social Forces* 58:1976-93.
- Heath, Linda. 1984. "Impact of Newspaper Crime Reports on Fear of Crime: Multimethodological Investigations." *Journal of Personality and Social Psychology* 47:263-76.
- Hindelang, Michael, Michael Gottfredson, and James Garofalo. 1978. *Victims of Personal Crime: An Empirical Foundation for a Theory of Personal Victimization*. Cambridge, Mass.: Ballinger.
- Land, Kenneth C., Patricia L. McCall, and Lawrence E. Cohen. 1990. "Structural Covariates of Homicide Rates: Are There Any Invariances across Time and Social Space?" *American Journal of Sociology* 95:922-63.
- Lauderdale, Pat. 1976. "Deviance and Moral Boundaries." *American Sociological Review* 41:660-76.
- Liska, Allen E., Joseph J. Lawrence, and Andrew Sanchirico. 1982. "Fear of Crime as a Social Fact." *Social Forces* 60:760-71.
- Liska, Allen E., Andrew Sanchirico, and Mark D. Reed. 1988. "Fear of Crime and Constraining Behavior: Specifying and Estimating a Reciprocal Effects Model." *Social Forces* 66:827-37.
- Liska, Allen E., and William Baccaglioni. 1990. "Feeling Safe by Comparison: Crime in the Newspapers." *Social Problems* 37:301-15.
- Long, T. Scott. 1983. *Confirmatory Factor Analysis*. Beverly Hills, Calif.: Sage.
- Messner, Steven F., and Judith R. Blau. 1987. "Routine Leisure Activities and Rates of Crimes: A Macro-Level Analysis." *Social Forces* 65:1035-52.
- Miethe, Terance D., Mark C. Stafford, and J. Scott Long. 1987. "Social Differentiation in Criminal Victimization. A Test of Routine Activities/Lifestyle Theories." *American Sociological Review* 52:184-94.
- Skogan, Wesley G., and Michael G. Maxfield. 1981. *Coping with Crime and Individual and Neighborhood Reactions*. Beverly Hills, Calif.: Sage.
- South, Scott J. 1987. "Metropolitan Migration and Social Problems." *Social Science Quarterly* 68:3-18.

- Stinchcombe, Arthur L. 1968. *Constructing Social Theories*. New York: Harcourt Brace & World.
- Wilson, James Q., and B. Boland. 1976. "Crime." Pp. 179–230 in *The Urban Predicament*, edited by William Gorham and Nathan Glazer. Washington, D.C.: Urban Institute.
- Wirth, Louis. 1938. "Urbanism as a Way of Life." *American Journal of Sociology* 44:1–24.
- Yin, Peter. 1985. *Victimization and the Aged*. Springfield, Ill.: Thomas.

Why Your Friends Have More Friends than You Do¹

Scott L. Feld

State University of New York at Stony Brook

It is reasonable to suppose that individuals use the number of friends that their friends have as one basis for determining whether they, themselves, have an adequate number of friends. This article shows that, if individuals compare themselves with their friends, it is likely that most of them will feel relatively inadequate. Data on friendship drawn from James Coleman's (1961) classic study *The Adolescent Society* are used to illustrate the phenomenon that most people have fewer friends than their friends have. The logic underlying the phenomenon is mathematically explored, showing that the mean number of friends of friends is always greater than the mean number of friends of individuals. Further analysis shows that the proportion of individuals who have fewer friends than the mean number of friends their own friends have is affected by the exact arrangement of friendships in a social network. This disproportionate experiencing of friends with many friends is related to a set of abstractly similar "class size paradoxes" that includes such diverse phenomena as the tendencies for college students to experience the mean class size as larger than it actually is and for people to experience beaches and parks as more crowded than they usually are.

Friendship is not only a source of satisfaction and security; it is also a way that individuals evaluate themselves and others. People expect themselves and others to have friends and wonder about the normality of those individuals who appear to have few or no friends. There has been little study of how people determine what is an adequate number of friends, but it is reasonable to suppose that individuals use the number of friends that their friends have as one basis of comparison. This article shows that, if individuals make this type of comparison, it is likely that

¹ A previous version of this paper was presented at the 1986 Sunbelt Social Network Conference in Santa Barbara, Calif. I appreciate the helpful suggestions of Bernard Grofman, Guillermo Owen, and Jill Suitor. Requests for reprints should be sent to Scott Feld, Department of Sociology, State University of New York, Stony Brook, New York 11794-4356.

most of them will feel relatively inadequate. I use data on friendship drawn from James Coleman's (1961) classic study *The Adolescent Society* to illustrate the phenomenon that most people have fewer friends than their friends have.

I will explore mathematically the logic underlying the phenomenon, showing that the mean number of friends of friends is always greater than the mean number of friends of individuals. Further analysis shows that the proportion of individuals who have fewer friends than the mean number of friends their own friends have is affected by the exact arrangement of friendships in a social network. While it is not a mathematical necessity that each individual will have fewer friends than the mean of her or his own friends, it is likely that most people will find themselves in this situation.

The basic logic can be described simply. If there are some people with many friendship ties and others with few, those with many ties show up disproportionately in sets of friends. For example, those with 40 friends show up in each of 40 individual friendship networks and thus can make 40 people feel relatively deprived, while those with only one friend show up in only one friendship network and can make only that one person feel relatively advantaged. Thus, it is inevitable that individual friendship networks disproportionately include those with the most friends.

EMPIRICAL EXAMPLES

Friendship is usually thought to be a symmetric relationship, as indicated by the common phrase, "They are friends." One way to operationalize friendship is to consider a friendship to be one that is so regarded by both of the individuals. In *The Adolescent Society*, Coleman (1961) collected data on friendships among the students in 12 high schools. Individuals were asked to name their friends, and pairs of individuals who named one another were given particular attention. It is these "friendships" that will be used as examples.

To illustrate the phenomenon under study here, consider the set of relationships depicted in figure 1, found among eight girls in "Marketville," one of the high schools included in the study. The names are fictitious.

In this example, Betty's only friend, Sue, has more friends than Betty has; Jane's two friends, Dale and Alice, average more friends than Jane has; Dale's three friends, Sue, Alice, and Jane, average more friends than Dale; and so forth. Of the eight girls, five (Betty, Jane, Pam, Dale, and Tina) have fewer friends than the average among their friends, while only two (Sue and Alice) have more friends than the average among their friends; one (Carol) has as many as the average among her friends. Table

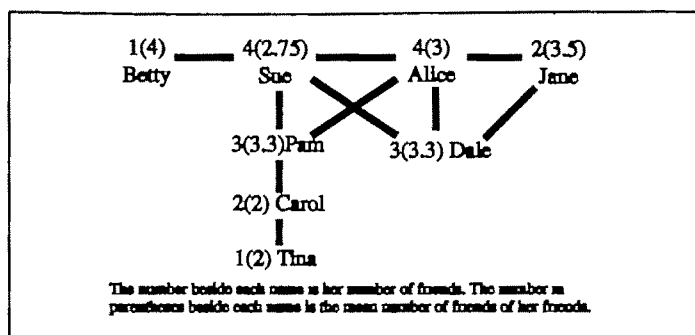


FIG. 1.—Friendships among eight girls at Marketville High School

1 shows each girl's number of friends in the first column and, in the third column, the mean number of friends her friends have. Twice as many (5:2) have fewer than average as have more than the average among their friends.

The complete network of all of the girls in Marketville shows the same pattern. Figure 2 reproduces the entire sociogram of mutual choices. Of the 146 girls who have any mutual friends, 80 have fewer friends than the mean among their friends while 41 have more; 25 have the same as the mean among their friends. Thus, nearly twice as many have fewer as have more than the mean among their friends. The same pattern

TABLE 1

A SUMMARY OF THE NUMBERS OF FRIENDS AND THE MEAN NUMBERS OF FRIENDS OF FRIENDS FOR EACH OF THE GIRLS IN FIGURE 1

	Number of Friends (x_i)	Total Number of Friends of Her Friends (Σx_i)	Mean Number of Friends of Her Friends ($\Sigma x_i/x_i$)
Betty...	1	4	4
Sue....	4	11	2.75
Alice....	4	12	3
Jane....	2	7	3.5
Pam....	3	10	3.3
Dale....	3	10	3.3
Carol...	2	4	2
Tina....	1	2	2
Total.....	20	60	23.92
Mean.....	2.5*	3†	2.99*

* For eight girls

† For 20 friends.

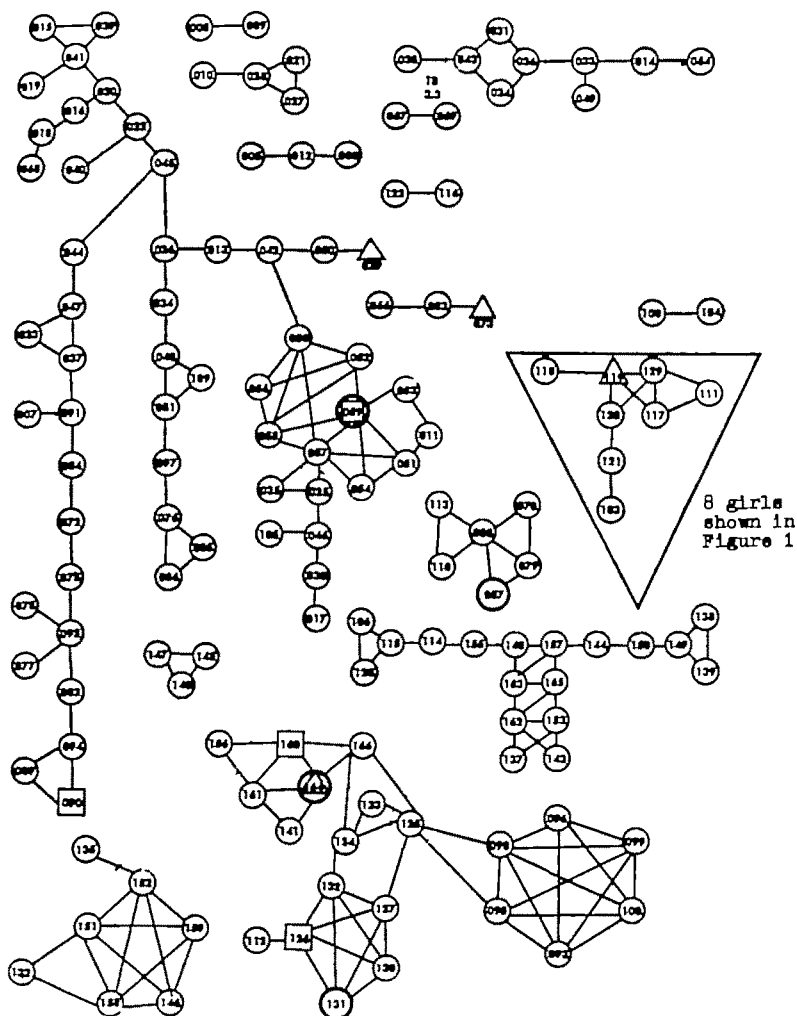


FIG. 2.—Network of reciprocated friendships among Marketville girls; the triangle at right indicates friendships illustrated in fig. 1. (From *The Adolescent Society* by James S. Coleman. © 1961 by the Free Press, a division of Macmillan, Inc. Used with permission.)

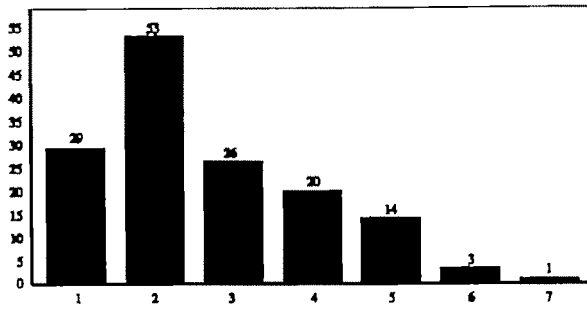
appears among the boys in Marketville and among the girls and boys of the other high schools reported in the Coleman study.²

TWO DISTRIBUTIONS: FRIENDS OF INDIVIDUALS AND FRIENDS OF FRIENDS

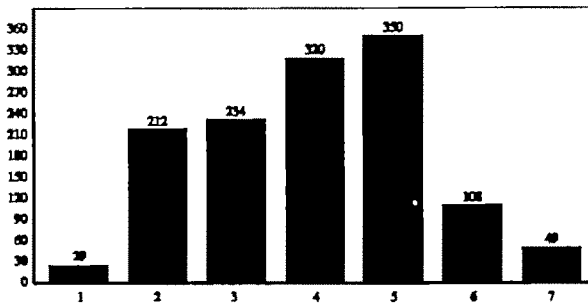
The phenomenon of people finding that their friends have more friends than they do can be partially understood by recognizing the difference between the distribution of numbers of friends of individuals and the distribution of the numbers of friends of friends. The distribution of friends of individuals is just the usual distribution of numbers of friends that we would usually examine, but the distribution of friends of friends includes some of the same individuals over and over. This complexity may become more understandable in reconsidering the case of the eight girls in figure 1. In the situation described in figure 1 and table 1, the distribution of friends of individuals would be for the eight girls having a total of 20 friends, with a mean of 2.5 friends per individual. However, the distribution of friends of friends includes more cases. For example, Jane's friends, Dale and Alice, contribute their numbers of friends to this distribution, and Sue's friends, Dale, Alice, Pam, and Betty, also contribute their numbers to this distribution. Note that Dale and Alice contribute to this distribution more than once; in fact, each friend contributes to the distribution of the numbers of friends of friends as many times as she has friends. There are a total of 20 friends (obviously counting some of the eight girls more than once) having a total of 60 friends, with a mean of 3.0 friends per friend. When each individual compares him- or herself with the average number of friends of his or her friends, the comparison is with a sample from the numbers of friends of friends, which is a different distribution from that of numbers of friends among individuals.

For the entire set of girls in Marketville (from fig. 2), the distribution of friends among individuals is skewed to the right, as shown in figure 3*a*, which indicates that a few individuals have many friends; this appears to

² Nearly identical results are obtained when individuals compare themselves with the "median" among their friends. The phenomenon that most individuals would feel relatively deprived if they compared themselves with the mean of their friends is essentially replicated if they compare themselves with the median (which is equivalent to determining whether a majority of their friends have more friends than they have). This can be seen in the example of fig. 1, where exactly the same girls who are below (above) the mean of their friends are also below (above) the median of their friends. Although comparison with the majority of one's friends may be as important as comparing with the mean, the present discussion is limited to discussion of the mean to simplify the discussion—also, the mathematics concerning the mean is somewhat more straightforward than that of the median.



a) The mean is 2.7



b) The mean is 3.4

FIG. 3.—(a) Distribution of numbers of friends for Marketville girls; (b) distribution of number of friends' friends for Marketville girls.

be a typical distribution of numbers of friends among individuals. The distribution of friends among friends is a weighted version of the original distribution, weighting those with many friends especially heavily; this weighting counteracts the original skew, as shown in figure 3b. The important characteristic of the distribution of numbers of friends of friends is that it inevitably has a higher mean than the distribution of friends of individuals.

In this situation, if individuals compared their numbers of friends with the mean number of friends of their own friends, and their friends were a representative sample of friends (mean number of friends of friends was 3.4), then 74% of the individuals would find themselves to be relatively deprived.³

³ In a discussion of this phenomenon, Guillermo Owen and Bernard Grofman noted that, even if individuals are accurately informed of the distribution of friends among individuals, a majority of the individuals will generally be below the mean, because the median is below the mean in distributions that are skewed to the right. In this

VARIANCE AFFECTS THE MEAN NUMBER OF FRIENDS OF FRIENDS

In general, there is a simple relationship between the original distribution of friends among individuals and the distribution of friends of friends. If the original distribution has n individuals with x_i ties apiece, the mean can be determined as $\Sigma x_i/n$. However, the distribution of friends has Σx_i cases (for all of the friends) and they have a total of Σx_i^2 friends, since each individual is counted as many times as she or he has friends, x_i , and that individual has Σx_i friends. Thus, the mean number of friends among the friends is $(\Sigma x_i^2)/(\Sigma x_i)$. This can be shown to be a simple function of the mean and variance in the original distribution of ties.⁴ That is: mean number of friends of friends = $(\Sigma x_i^2)/(\Sigma x_i)$ = mean(x) + variance(x)/mean(x).

The expression above shows that the mean among friends is always at least as great as the mean among individuals, and the mean among friends increases with the variance among individuals, with a given mean among individuals. The mean among friends is much greater than the mean among individuals if there is much variation in the population.

The Arrangement of Individual Friends

While the mean of the distribution of number of friends of friends is completely determined by the distribution of friends of individuals, the particular samples of friends of friends may vary among individuals. If each individual's friends are approximately representative of all friends (in terms of their numbers of friends), then individuals comparing themselves with their own friends are essentially comparing themselves with the overall distribution among friends. The calculations in the previous section indicate that the mean number of friends of friends is higher

case, 56% of the individuals were below the mean number of friends of individuals; the higher mean of numbers of friends' friends increases the proportion of individuals who experience themselves as below the mean of their friends' friends—74% of the individuals are below that mean.

⁴ The mean number of friends' friends is just the total number of friends' friends divided by the number of friends. To determine the total number of friends' friends, consider that each individual is a friend x_i times and has x_i friends, so that individual contributes x_i friends' friends x_i times, a total of x_i^2 friends' friends. Thus, the total number of friends' friends (the numerator) is simply this quantity summed over all individuals, Σx_i^2 . The total number of friends (the denominator) is simply the number of friends of each individual, x_i , summed over all individuals, Σx_i . Thus, the mean number of friends' friends is just $(\Sigma x_i^2)/(\Sigma x_i)$. Some relatively simple algebra shows that this can be expressed as a function of the mean ($\Sigma x_i/n$) and the variance ($\Sigma x_i^2/n - \text{mean}^2$). Thus, the mean number of friends' friends is:

$$(\Sigma x_i^2)/(\Sigma x_i) = \text{mean}(x) + \text{variance}(x)/\text{mean}(x).$$

than the mean number of friends of individuals; consequently, a higher proportion of individuals will be below the mean number of friends of friends than below the mean number of friends of individuals (the more appropriate comparison).⁵ However, individuals may have unrepresentative sets of friends, and the following two sections consider some of the possible consequences of such unrepresentativeness.

First, it is important to recognize yet another distribution and another mean. Refer again to the situation in figure 1 as summarized in table 1. The eight Marketville girls have a total of 20 friendships, with a mean of 2.5. The friends have a total of 60 friends, with a mean of 3.0. At the same time, each girl has a mean among her friends, and the means for all the girls have a mean of 2.99. This last mean differs from the mean number of friends of friends (only slightly in this case) because the two-step averaging process weights each of the friends differently: each of the means of Sue's four friends are averaged, and that average counts equally with Betty's average based on her only friend. Thus, the particular arrangement of the friendships affects this last average.

Correlations between Individuals and Their Friends

There may be situations in which individuals are disproportionately friends with others with similar friendship volumes (similars attract) and other situations in which people are disproportionately friends with those with different friendship volumes (e.g., where some individuals "collect" several otherwise-isolated individuals as their friends). The implications of these types of correlations can be seen in some hypothetical examples. Figure 4 shows four possible ways that the same distribution of friendship volumes can be arranged in networks; this distribution includes four individuals having three friends each and 12 individuals having one friend each.

The possibilities are arranged from the one with a perfect positive correlation between individuals and their friends (fig. 4a) to one with a

⁵ Note that, even though the mean number of friends of an individual's friends is unrepresentatively high as an estimate of the mean number of friends of individuals, an individual who understands the nature of this problem can use the information derived from his or her friends to estimate the mean number of friends for all people. The information from friends should be weighted to take account of the frequency with which that particular individual is included in various people's experience, so a friend with x friends should be weighted by $1/x$, so that friend is not overcounted. Thus, the individual's appropriate estimate of the mean number of friends of individuals is given by $\sum x_i(1/x_i)/\sum(1/x_i) = x/\sum(1/x_i)$. This more realistic estimate is always less than the mean number of friends of that individual's friends and so will make the individual feel appropriately better relative to others.

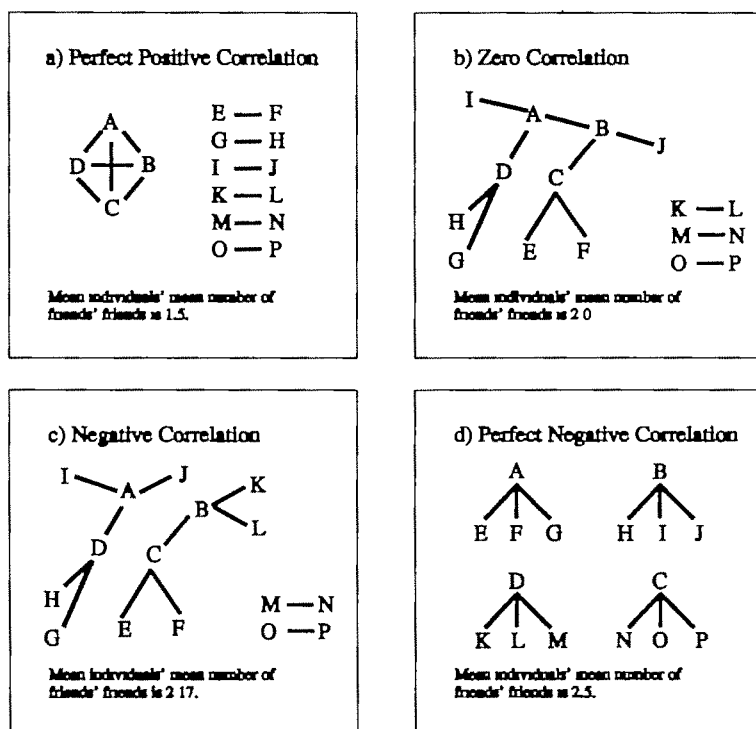


FIG. 4.—Four arrangements of the same distribution of individual numbers of friends (A, B, C, and D have three friends each, and E, F, G, H, I, J, K, L, M, N, O, and P have one friend each).

perfect negative correlation (fig. 4d). It should be apparent in all cases that the mean among the 16 individuals is 1.5 friends each and the mean among the 24 friends is 2.0 friends each. However, the mean individual mean number of friends' friends increases from figure 4a to figure 4d; the more negative the correlation between the individuals and their friends, the greater the mean individual mean number of friends' friends and the greater the proportion of individuals below that mean. For figures 4b, 4c, and 4d, where some individuals differ from their friends, the proportions of those who have fewer friends than the mean of their friends are 60%, 67%, and 75%, respectively.

The mean individual mean number of friends' friends can be calculated as follows:⁶ mean individual mean number of friends' friends = $\Sigma(x_i/x_j)/n$, for all i and j who are friends with one another.

⁶ It is apparent that for each individual, i , with friends designated by j 's, the total number of friends' friends is Σx_j and the mean is $(\Sigma x_j)/x_i = \Sigma(x_j/x_i)$. The total of these

For a given set of friendship volumes, this expression is minimized when $x_i = x_j$ in all cases; in that situation, the mean individual mean number of friends' friends is just the mean number of friends of individuals. On the other hand, the maximum value is achieved when individuals with the fewest friends are friends of those with the most friends—in that case, the mean can be considerably larger than the mean number of friends' friends. It may be as high as:⁷ $\text{mean}(x) + 2 \times [\text{variance}(x)/\text{mean}(x)]$.

Further Implications of the Exact Arrangement of Friendships

Even with a given correlation between individuals and their friends, there can be variation in the distribution of friendships. The exact arrangement of friendship among individuals will determine the number of individuals with more friends than the mean of their friends (e.g., there could be a few individuals whose friends have many more friends

means is just the sum of these expressions over all i 's and their corresponding j 's, and the mean of these means is just this total divided by the number of individuals, n . That is, $\sum(x_i/x_j)/n$. This can be illustrated with three individuals, A, B, and C, and two ties, A—B—C, and four friendships, AB, BA, BC, and CB. Individual A has one friend, B, who has two friends (a mean of 2); B has two friends, A and C, with one friend each (a mean of 1), and C has one friend, A, with two friends (a mean of 2). The three individuals have a mean of their means of 5/3.

⁷ The mean individual's mean number of friends' friends is given by this expression in the case of the "wheel" pattern of friendships, in which one person is friends with everyone else and they are not friends with one another. Some equations show the values of the parameters in the case of a wheel composed of n individuals (1 hub and $n - 1$ spokes). They are: mean number of friends of individuals = $2(n - 1)/n$; variance in number of friends = $(n - 2)^2(n - 1)/(n^2)$; mean number of friends' friends = $n/2$; and mean individual mean number of friends' friends = $[(n - 1)^2 + 1]/n$. It can be seen that the value of the mean individual mean number of friends' friends is the specified function of the mean and variance. For example, in the case of 10 individuals (1 hub and 9 spokes), the mean number of friends of individuals is 1.8 with a variance of 5.76, the mean number of friends' friends is 5, and the mean individual mean number of friends' friends is 8.2. An example with three individuals (1 hub and 2 spokes) is presented in n. 6. Since the wheel appears to be an extreme type of distribution, it is conjectured that this expression gives the ~~maximum~~ value of the mean individual's mean number of friends' friends for a specified distribution of friendship volumes. An additional basis for this conjecture is the apparent symmetry. The minimum value of mean individual mean number of friends' friends is achieved when all individuals have the same number of friends as each of their friends, and that mean is just the mean number of friends. When particular friends are "randomly" assigned, the mean individual mean number of friends' friends is equal to the mean number of friends' friends, which is the variance divided by the mean greater than the mean number of friends (as given by the expression in the text). Since the minimum value is just the variance divided by the mean less than the random case, the conjecture is that the maximum value is just the variance divided by the mean more than the random case.

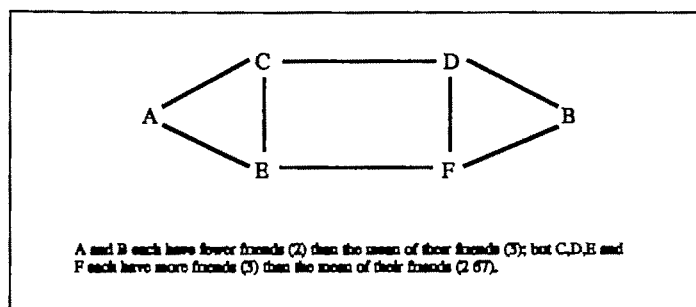


FIG. 5.—An exceptional situation in which a majority of individuals have more friends than the mean of their friends.

than they have, while there are many others whose friends have a few more friends than they have). Thus, while the means of the various distributions are determined, the number of individuals who have fewer friends than the mean of their friends' friends will depend on the exact arrangement of friendships. As shown in figure 5, it is even possible, under very carefully contrived conditions, for a majority of individuals to have more friends than the mean of their friends.

However, very few arrangements of friendships have this consequence, and there are no theoretical reasons to expect these exceptional situations. If the mean number of friends' friends and the mean individual mean number of friends' friends are much higher than the mean among individuals, we can expect that a high proportion of individuals will have fewer friends than the mean among their friends, as is true among the Marketville girls and the boys and girls of the other high schools included in *The Adolescent Society* (Coleman 1961).⁸

⁸ Further research might explore how various systematic processes in the construction of social networks might lead to particular types of patterns of friendships with particular consequences for the experiences of friends' friends. For example, if friendships are primarily established through one focus or a few foci of activity (Feld 1981), then individuals might have numbers of friends similar to the numbers their own friends have (i.e., people who draw many friends from a large focus of activity will have friends who also have many friends from the same large focus of activity), and the experience of relative deprivation may be minimized. On the other hand, if individuals disproportionately make friends with a few individuals with particular desirable characteristics (see Feld and Elmore 1982), there may be large amounts of variation in friendship volumes that lead to the widespread experience of relative deprivation by individuals. Actual patterns of friendships reflect several underlying processes by which friendships are developed and maintained and can become very complex. Formally, the proportion of individuals who experience relative deprivation is determined by the probability that the mean (median) number of an individual's friends' friends is greater than the individual's own number of friends under a particular specifiable set of conditions.

Asymmetric Relationships

An analogous phenomenon occurs in situations with asymmetric relationships, the type that are directly revealed in sociometric-choice data. In that case, most individuals choose people who are more popular than they are. The logic employed when individuals compare their own popularity with that of the people they choose is identical to that described above. Individuals who are popular are chosen by many others and so can lead many others to feel relatively deprived; individuals who are unpopular are rarely chosen and so can make few people feel advantaged. The distributions of popularity among individuals and among those they choose can be shown to have the same characteristics as the various distributions of numbers of friends described above.

Related Phenomena

The tendency for individuals to experience a biased sample of numbers of friends of others is one of a large set of related phenomena. Feld and Grofman (1977) called one such phenomenon the "class size paradox"; they showed that, if there is any variation in college class sizes, then students experience the average class size as being larger than it is. They experience a higher average class size than exists for the college because many students experience the large classes, while few students experience the small classes. Hemenway (1982) noted the same phenomenon in terms of college class size and remarked on several other similar phenomena; specifically, he suggested that people disproportionately experience the most crowded times in public places (including restaurants, beaches, and highways) and so experience these places as being more crowded than they usually are.⁹

It should be noted that class size paradoxes are often experienced in situations in which they are not seen as paradoxical. For example, most cities are small, but most people live in large cities; while most organizations are small, a disproportionate number of individuals work for large organizations (Granovetter 1984).

Whether paradoxical or not, it is important to recognize that the experiences of class sizes have a reality of their own. The fact that many

⁹ A class size paradox arises when individuals disproportionately experience classes containing more people. This idea can be extended to include an "observer class size paradox," whereby individuals observing classes of objects are more likely to observe and therefore be aware of the larger classes of objects. For example, Good (1983) suggested that galaxies with more planets are more likely to be observed than smaller galaxies; consequently, the average size of galaxies that are observed is larger than the average size of galaxies.

individuals experience disproportionately large average class sizes (large college classes, crowded expressways, populous cities, large families, etc.) may be more sociologically and practically significant than the object average; for example, it may not matter so much that roads are usually empty if most people are caught in rush-hour traffic.

Furthermore, the recognition of the different ways that people experience the same objective situation can help us understand some conflicts of interest. For example, Feld and Grofman (1980) consider that college faculty members experience the actual average class size, while their students disproportionately experience the larger classes; as a result, even though faculty and students have similar preferences for smaller classes, students have an interest in minimizing variation in class size, while faculty have an interest in maximizing that variation.

CONCLUSIONS

The term "class size paradox" can be considered a generic term for all phenomena that arise where classes are of varied sizes, members of those classes disproportionately experience the larger classes, and most individuals therefore experience the average class size as larger than it is. Such phenomena are often more than mathematical curiosities; they have implications for how people experience and respond to various aspects of their environments.

The tendency for most people to have fewer friends than their friends have is one sociologically significant class size paradox. Individuals who find themselves associated with people with more friends than they have may conclude that they themselves are below average and somehow inadequate. The analysis presented in this paper indicates that most individuals have friends who have more friends than average and so provide an unfair basis for comparison. Understanding the nature of a class size paradox should help people to understand that their position is relatively much better than their personal experiences have led them to believe.

REFERENCES

- Coleman, James S. 1961. *The Adolescent Society*. New York: Free Press.
- Feld, Scott L. 1981 "The Focused Organization of Social Ties." *American Journal of Sociology* 86:1015-35.
- Feld, Scott L., and Richard Elmore. 1982. "Patterns of Sociometric Choices: Transitivity Reconsidered." *Social Psychology Quarterly* 45:77-85.
- Feld, Scott L., and Bernard Grofman 1977 "Variations in Class Size, the Class Size Paradox, and Consequences for Students." *Research in Higher Education* 6:215-22

- . 1980. "Conflict of Interest between Faculty, Students, and Administrators: Consequences of the Class Size Paradox." *Frontiers of Economics* 3:111–16.
- Good, I. J. 1983. *Good Thinking: The Foundations of Probability and Its Applications*. Minneapolis: University of Minnesota Press.
- Granovetter, Mark. 1984. "Small Is Bountiful: Labor Markets and Establishment Size." *American Sociological Review* 49:323–34.
- Hemenway, David. 1982. "Why Your Classes Are Larger than 'Average.'" *Mathematics Magazine* 55:162–64.

Theoretical Foundations for Centrality Measures¹

Noah E. Friedkin

University of California, Santa Barbara

Three measures of actors' network centrality are derived from an elementary process model of social influence. The measures are closely related to, and cast new light on, widely used measures of actors' centrality; for example, the essential social organization of status that has been assumed by Hubbell, Bonacich, Coleman, and Burt appears as a deducible outcome of this social influence process. Unlike previous measures, which have been viewed as competing alternatives, the present measures are complementary and, in their juxtaposition, provide for a rich description of social structure. The complementarity indicates a degree of theoretical unification in the work on network centrality that was heretofore unsuspected.

INTRODUCTION

J. A. Barnes, an eminent social anthropologist, suggested that the theoretical foundations of research on social networks were rudimentary: "There is no such thing as a theory of social networks; perhaps there never will be. The basic idea behind the metaphorical and the analytic uses of social networks—that the configuration of cross-cutting interpersonal bonds is in some unspecified way causally connected with the actions of these persons and with the social institutions of their society—this remains a basic idea and nothing more. It constitutes what Homans calls an 'orienting statement' rather than a theory with propositions that can be tested" (1972, p. 2).

Other prominent structuralists have echoed Barnes's thoughts (Alba

¹ For their contributions to this article I am indebted to members of the social network group at the University of California, Santa Barbara. Parts of the paper have been presented at the 1990 Social Network Conference, San Diego, and the 1990 meetings of the American Sociological Association, Washington, D.C. Requests for reprints should be sent to Noah Friedkin, Program in Policy and Organization, Graduate School of Education, University of California, Santa Barbara, California 93106.

1982; Granovetter 1979; Rogers 1987; Wellman 1983). Such criticism, designed to be provocative, somewhat exaggerates the circumstances of the field. In fact, in the development and use of measures of actors' positions in social networks, respectable advances have been made toward a formal theory of social network mechanisms. An important part of this enterprise, and the focus of this article, has been the development of simple numerical indices, so-called measures of network centrality or sociometric status, that describe actors' positions in terms of features of their network environments.² These measures have entered into noteworthy empirical studies revolving especially on the distribution of power and influence among individual and collective actors (Marsden and Laumann 1984).

Much of the current thinking about actors' network centrality has been defined by the work of Freeman (1979) and Bonacich (1972a).³ Bonacich's measure of centrality, which is closely related to Hubbell's (1965) measure of sociometric status, Coleman's (1973) measure of power, and Burt's (1982) measure of prestige, has been widely employed in the burgeoning literature on collective actors in interorganizational networks. Freeman's influential analysis and consolidation of the extant literature on centrality have provided a framework for a large number of investigations on power and influence in informal communication networks.

The extant measures of centrality appear to provide competing hypotheses about the relationship between particular structural features of a network and actors' behavior, opinions, or interpersonal influences. Without exception, the proposed hypotheses are not derived from any broader theory but are ad hoc formalizations of plausible ideas. Freeman (1979, p. 217) is properly circumspect about the limitations of such intuitive foundations: "Ideally, measures should grow out of advanced theoretical efforts; they should be defined in the context of explicit process models. Before such models can be developed, however, a certain amount of conceptual specification is necessary; the basic parameters of the problem must be set down. Thus, the introduction of measures in

² For evaluation of these efforts see Freeman, Roeder, and Mulholland (1980) and Bolland (1988). Numerous centrality measures have been proposed since the seminal work of Bavelas (1948); among the recent proposals are those of Dorelan (1986) and Stephenson and Zelen (1989).

³ There is another line of work on centrality in exchange networks with restricted flows of resources (Cook et al. 1983; Cook, Gillmore, and Yamagishi 1986; Markovsky, Willer, and Patton 1988; Willer 1986; Marsden 1983). Although Bonacich (1987) suggests that these two lines may be integrated, I do not deal with this possibility in this article.

the present context must be understood simply as a way of clarifying the centrality concept."

Social process foundations are preferred on intellectual grounds. It is satisfying to work with measures that have both clear-cut and elementary theoretical foundations. The appropriate interpretation of measures that lack such foundations is often ambiguous. Social process foundations provide a clarity of meaning but, in doing so, restrict applicability; measures that have been derived from a social process can only be meaningfully applied to situations in which the social process occurs. Hence, measures that have been derived from a particular social process do not necessarily supplant other measures that may have a different theoretical foundation.

The contribution of this article is the derivation of three measures of actors' network centrality from a process model of social influence. The first of these measures—total effects centrality—indicates the total relative effect of an actor on the other actors in the network. The second measure—immediate effects centrality—indicates the rapidity with which an actor's total effects are realized. The third measure—mediative effects centrality—indicates the extent to which particular actors have a role in transmitting the total effects of other actors. Because of their common theoretical origin, these measures are complementary rather than competitive; each addresses a different question that might be posed about the social structure of a group.

FORMAL FOUNDATIONS

The foundations for the centrality measures are laid out in this section of the article. These foundations consist of the process model from which the measures are derived, a structural classification of the social influence networks that may be involved in the process, and relevant properties of the total interpersonal effects that arise from the process.

Opinion Formation Process

The process of opinion formation can rarely be reduced to accepting or rejecting the consensus of others; typically, individuals form their opinions in a complex interpersonal environment in which influential opinions are in disagreement and liable to change. How individual opinions and consensus may form in such complex circumstances is the subject of a formal theory that has been under development by social psychologists and mathematicians since the 1950s (French 1956; Harary 1959; DeGroot 1974; Friedkin 1986; Friedkin and Cook 1990; Friedkin and Johnsen

1990).⁴ While the theory is meant to be descriptive of the actual process of opinion formation, it also is consistent with a normative theory of rational decision making (Wagner 1978; Lehrer and Wagner 1981).

The theory, along the lines of a simple recursive definition, stipulates that individuals' settled opinions are developed in a joint process of group-level polarization of opinions (escalation) and individual-level weighting of the opinions of influentials (compromise):

$$y_1 = Xb, \quad (1)$$

and

$$y_t = \alpha W y_{t-1} + \beta Xb, \quad (2)$$

for $t = 2, 3, \dots$, where y_t is an $n \times 1$ vector of individuals' opinions at time t , X is an $n \times k$ matrix of k exogenous variables, b is a $k \times 1$ vector of coefficients for the exogenous contributions, W is an $n \times n$ stochastic matrix of interpersonal influences ($0 \leq w_{ij} \leq 1$, $\sum_{j=1}^n w_{ij} = 1$), $0 < \alpha < 1$ is a scalar weight of the interpersonal influences, and $\beta = \delta(1 - \alpha)$ is a scalar containing a coefficient of boundary attenuation ($1 - \alpha$) and a coefficient of group polarization (δ).

The process (1)–(2) stipulates that all exogenous influences on individuals' opinions are reflected in their initial opinions on an issue, and that, at each subsequent point in time, individuals' opinions are altered by a set of interpersonal influences.⁵ It stipulates that interpersonal influences modify the effects of exogenous conditions on opinions; for instance, group pressures toward uniformity diminish the importance of socioeconomic background as an influence on group members' opinions.⁶ The

⁴ Empirical supports for the theory are reviewed in French (1956) and Friedkin and Johnsen (1990). Friedkin and Cook (1990) are able to reject several models that are inconsistent with the theory. The theory is consistent with the mixed regressive-autoregressive (endogenous feedback) model that has become the standard statistical model for the study of social influence networks (Anselin 1988).

⁵ The matrix contains the set of interpersonal influences. French (1956) first proposed that social influence was a finite distributed resource. Following Lewin (1951), he argued that persons' opinions may be tugged in various directions by the influences of their significant others and that individuals deal with these cross pressures by shifting their opinions into positions where the pressures are balanced. French operationalized his theory with the assumption that social influence is distributed evenly among those persons with whom an individual is in direct communication. Subsequently, numerous investigators have held the view that social influence is a finite resource that is distributed among a set of significant others, although they sometimes relax French's assumption of an even distribution of social influence (see Implementation below).

⁶ Here the model is consistent with Festinger's (1953, p. 237) speculations about such a redirection of influences: "When a person or a group attempts to influence someone, does that person or group produce a totally new force acting on the person, one

model also makes provision for a "polarizing" or escalation process in which all of the opinions in a group become more extreme as a consequence of interpersonal interactions.⁷ In the absence of any such polarization, members' opinions are strictly weighted averages of other members' opinions, and the opinions that are produced by the process must be in the range of the group's initial opinions.

Four useful reduced-form equations can be derived from the process described by equations (1)–(2):⁸

$$y_{\infty} = \alpha W y_{\infty} + \beta X b, \quad (3)$$

$$y_{\infty} = (I - \alpha W)^{-1} \beta X b, \quad (4)$$

$$y_{\infty} = (I - \alpha W)^{-1} \beta y_1, \quad (5)$$

and

$$\lim_{\alpha \rightarrow 1} (I - \alpha W)^{-1} \beta y_1 = \delta W^{\infty} y_1. \quad (6)$$

With these equations, the model brings together two previously separate lines of formal work. Equations (3)–(4) establish the formal relationship of the present model with work on mixed regressive-autoregressive models of spatial interaction, including interpersonal influence (Ord 1975; Cliff and Ord 1981; Anselin 1988; Erbring and Young 1979; Doreian 1981; Burt 1982, 1987). Equations (5)–(6) establish the formal relationship of the present model with the work of French (1956), Harary (1959), DeGroot (1974), and Friedkin (1986), all of which are concerned with social structural conditions of reaching consensus.

The process model is consistent with the development of consensus or a pattern of disagreement. Consensus appears as a limiting condition for

which had not been present prior to the attempted influence? Our answer is No—an attempted influence does not produce any new motivation or force. Rather, what an influence attempt involves is the redirection of psychological forces which already exist."

⁷ In the recent social psychological literature, group polarization refers not to the cleavage of a group but to the movement of all group members' opinions toward the same extreme position; see Isenberg (1986) for a review of the experimental literature on this process. Cartwright (1971) has suggested that group polarization is in part an artifact of the social influence process. Within the framework of the model, group polarization that *cannot* be accounted for by the social influence process will be reflected in values of δ greater or less than unity. Such exogenously determined group polarization may drive final opinions outside the range of group members' initial opinions.

⁸ The derivations of eqq. (3)–(5) are straightforward. See Friedkin and Johnsen (1990) for a proof of the limit $\lim_{\alpha \rightarrow 1} (I - \alpha W)^{-1} \beta y_1 = W^{\infty} y_1$ in eq. (6).

$\alpha \rightarrow 1$ in suitable influence networks (the permitting conditions are defined below). Given a network in which consensus might be attained, it is noteworthy that the model does not inevitably lead to consensus (cf. Abelson 1964); in such networks, depending on α , various patterns of more or less marked disagreement are possible. Horowitz (1962, p. 182) has commented that "any serious theory of agreements and decisions must at the same time be a theory of disagreements and the conditions under which decisions cannot be reached." The present model satisfies Horowitz's criterion.

For the analysis in this article the model is constrained by two simplifying assumptions. I assume that there is no group polarization (i.e., $\delta = 1$). The constraint is in line with Friedkin and Cook's (1990) support of Cartwright's (1971) speculation that group polarization is a by-product of the social influence process; in any event, it does not mislead to omit this parameter. For technical reasons, I also assume that the influence networks are "regular" (the definition of such networks follows).⁹ Many structures can be described by regular networks; for example, hierarchies consisting of asymmetric influences can be represented with imbalanced relationships ($1 > w_{ij} > w_{ji} > 0$) in which one weight is close to unity and the other is close to zero.

Classification of Influence Networks

The theory of digraphs (Harary, Norman, and Cartwright 1965) and Markov chains (Kemeny and Snell 1960) provides a classification of influence network structure (\mathbf{W}) that is important in this analysis. A network is *disconnected* if its membership can be partitioned into two or more groups between which no influence relations exist; otherwise it is *connected*. A connected network is *strong* (ergodic) if every member has direct or indirect influence on all other members. A connected network

⁹ This assumption is useful because it assures the convergence of \mathbf{W}^n in eqq. (6) and (11). Periodic \mathbf{W} would not converge. An example would be

$$\mathbf{W} = \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix},$$

all odd powers of which are

$$\mathbf{W} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

and all even powers of which are

$$\mathbf{W} = \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}.$$

is *unilateral* if, for all pairs of members, at least one member of a pair has direct or indirect influence on the other member. A connected network is *weak* given at least two members neither of whom has direct or indirect influence on the other.

The class of strong networks has two important subclasses: a network is *regular* (aperiodic or acyclic) if some power of its matrix presents entirely positive entries; otherwise, the network is *periodic*.¹⁰ The class of unilateral networks also has two important subclasses: a network is *centered* if it contains a single regular subnetwork ($n \geq 1$) whose members directly or indirectly influence all other network members; otherwise the network is *noncentered*.

Total Interpersonal Effects

The process model describes how initial opinions held by a group's members are transformed by interpersonal influences. Actors' total interpersonal effects are given by an $n \times n$ matrix, V , of reduced-form coefficients that transform initial into final opinions:

$$y_{\infty} = Vy_1, \quad (7)$$

where

$$V = (I - \alpha W)^{-1} (1 - \alpha). \quad (8)$$

I refer to V as the total interpersonal effects matrix and will base several measures of centrality on it. However, before these centrality measures are introduced, relevant properties of V need to be described.

1. The matrix V is row stochastic: its entries are nonnegative ($0 \leq v_{ij} \leq 1$) and each of its rows sum to unity ($\sum_{j=1}^n v_{ij} = 1$). Hence, an entry in V gives the relative weight of the initial opinion of actor j in determining the final opinion of actor i .

2. As $\alpha \rightarrow 1$, V may converge to a matrix (V_U) that transforms a set of heterogeneous initial opinions into consensus; that is,

$$V_U = \begin{bmatrix} c_1 & c_2 & \dots & c_n \\ c_1 & c_2 & \dots & c_n \\ \cdot & \cdot & \dots & \cdot \\ \cdot & \cdot & \dots & \cdot \\ \cdot & \cdot & \dots & \cdot \\ c_1 & c_2 & \dots & c_n \end{bmatrix}.$$

The distinctive feature of V_U is the convergence of the total interpersonal effects of each actor j to a constant $v_{ij} = c_j$ ($0 \leq c_j \leq 1$) for all i . The

¹⁰ Given $w_{ij} > 0$ for any i , all strong networks must be regular.

$1 \times n$ vector of these constants, $c = [c_1 \ c_2 \ \dots \ c_n]$, is a left eigenvector of \mathbf{W} ,

$$\lambda c = c\mathbf{W}, \quad (9)$$

for $\lambda = 1$ (the largest eigenvalue).

Whether V_D emerges as $\alpha \rightarrow 1$ depends on the structure of \mathbf{W} . In regular and centered influence networks, for $\alpha \rightarrow 1$, the outcome will be consensus regardless of the distribution of initial opinions. In influence networks that are noncentered, weak, or disconnected, for $\alpha \rightarrow 1$, the outcome will be subsets of agreeing actors rather than global consensus. In such a case \mathbf{V} may be rearranged in block diagonal form, for example,

$$\mathbf{V}_B = \begin{bmatrix} c_1 & c_2 & 0 & 0 & 0 & 0 \\ c_1 & c_2 & 0 & 0 & 0 & 0 \\ 0 & 0 & c_3 & c_4 & c_5 & 0 \\ 0 & 0 & c_3 & c_4 & c_5 & 0 \\ 0 & 0 & c_3 & c_4 & c_5 & 0 \\ 0 & 0 & 0 & 0 & 0 & c_6 \end{bmatrix},$$

where each block consists either of a single actor or a larger subset of actors involved in a regular or centered subnetwork.

For $\alpha < 1$, regardless of the connectivity category of the network, particular actors may or may not be in agreement at the end of the social influence process. Global consensus can appear only if there was consensus at the start of the process; hence, the expectation for $\alpha < 1$ is a pattern of disagreement.¹¹ Total effect matrices for $\alpha < 1$ are referred to as nonuniform (\mathbf{V}_D).

3. The total interpersonal effect of one actor on another is related to the number and length of the various paths and sequences that join them in the network of interpersonal influences.¹² This relationship has the following formal foundation:

$$\begin{aligned} \mathbf{V} &= (\mathbf{I} - \alpha\mathbf{W})^{-1}(1 - \alpha) \\ &= (\mathbf{I} + \alpha\mathbf{W} + \alpha^2\mathbf{W}^2 + \alpha^3\mathbf{W}^3 + \dots)(1 - \alpha). \end{aligned} \quad (10)$$

Consider an arbitrary term, $\alpha^k\mathbf{W}^k$, in the infinite series ($\alpha\mathbf{W} + \alpha^2\mathbf{W}^2 + \alpha^3\mathbf{W}^3 + \dots$). If all the nonzero entries in \mathbf{W} were converted to 1's, an entry in \mathbf{W}^k would indicate the number of ways in which interpersonal

¹¹ Thus $y_\infty = \mathbf{V}y_1$ for $\delta = 1$; since each of the rows in \mathbf{V}^{-1} sum to one, if the outcome is consensus, $\mathbf{V}^{-1}y_\infty = y_\infty = y_1$.

¹² In a path of interpersonal influences ($i \rightarrow j \rightarrow k \rightarrow l$) no actor appears more than once. In a sequence of interpersonal influences the same actor may appear more than once (e.g., $i \rightarrow j \rightarrow k \rightarrow j \rightarrow l$).

influence flows in k -steps from one actor to another in the network; the greater the number of such k -step flows, the larger the expected impact of one actor on the other. The network model qualifies this expectation in two respects. First, the impact of a single k -step flow diminishes with the number of steps involved. Second, the impact of flows that traverse the same number of steps depends on the strengths (αw_{ij}) of constituent links. In short, the total interpersonal effect of one actor on another is a weighted sum of the number of different channels of interpersonal influence that join them in the network, where each channel is weighted according to its length and strength of constituent links.

4. Now consider the sequences of interpersonal influence from actor j to actor i in which actor j appears only once. For $\alpha \rightarrow 1$ in regular influence networks, the average length of these sequences (each sequence weighted according to the strength of its constituent links) is m_{ij} :

$$\mathbf{M} = (\mathbf{I} - \mathbf{Z} + \mathbf{E}\mathbf{Z}_{jj})\mathbf{D}, \quad (11)$$

where \mathbf{D} is the diagonal matrix with elements $d_{ii} = 1/c_i$, c_i is an element of the left eigenvector of \mathbf{W} in equation (9), \mathbf{E} is an $n \times n$ matrix with all entries 1, $\mathbf{Z} = (\mathbf{I} - \mathbf{W} + \mathbf{W}^n)^{-1}$, and \mathbf{Z}_{jj} results from \mathbf{Z} by setting off-diagonal entries to zero (Kemeny and Snell 1960, p. 79). These average lengths completely determine the influence network:

$$\mathbf{W} = \mathbf{I} + (\mathbf{D} - \mathbf{E})(\mathbf{M} - \mathbf{D})^{-1} \quad (12)$$

(Kemeny and Snell 1960, p. 81).

5. The mean length of the sequences of interpersonal influence (i.e., m_{ij}) can be decomposed into the number of such sequences from actor j to actor i via particular other actors:

$$m_{ij} = \sum_{k=1}^n t_{(j)ik}, \quad i \neq j \neq k, \quad (13)$$

where $t_{(j)ik}$ is the ik th entry in $\mathbf{T}_{(j)} = (\mathbf{I} - \mathbf{W}_{(j)})^{-1}$ and $\mathbf{W}_{(j)}$ is a matrix obtained by deleting the j th row and column from \mathbf{W} (Kemeny and Snell 1960, pp. 112-13).

CENTRALITY MEASURES

Three centrality measures stem from these formal foundations. This section of the article presents the definitions of the measures along with an analysis of their relationships to measures that have been proposed by Katz (1953), Hubbell (1965), Bonacich (1972a, 1987), Freeman (1979), Coleman (1973), and Burt (1982).

Total Effects Centrality

The total effects of actor j on other members of the group are given by the entries in column j of \mathbf{V} . Total effect centrality, TEC , is defined as the average total effect of an actor:

$$c_{TEC(j)} = \frac{\sum_{i=1}^n v_{ij}}{n-1}, \quad i \neq j. \quad (14)$$

For uniform total effects (\mathbf{V}_U), there is no variance in the total effects of each actor and, therefore, TEC provides an exact description of each actor's relative influence in determining the consensus of opinions in the group.¹³ For blocked and heterogeneous total interpersonal effects (\mathbf{V}_B and \mathbf{V}_D , respectively), some caution is warranted. In the case of \mathbf{V}_B , an actor may be highly influential in a particular subnetwork but have no influence on the remainder of the network members. In the case of \mathbf{V}_D , the precision of the measure is reduced by the variance of an actor's total effects.

Katz.—The TEC measure is closely related to Katz's (1953) index of sociometric status:

$$\begin{aligned} \mathbf{t} &= (\alpha \mathbf{R} + \alpha^2 \mathbf{R}^2 + \dots + \alpha^n \mathbf{R}^n)' \mathbf{e} \\ &= [(\mathbf{I} - \alpha \mathbf{R})^{-1} - \mathbf{I}]' \mathbf{e}, \end{aligned}$$

where \mathbf{R} is a $n \times n$ matrix in which $r_{ij} = 1$ if actor i is responsive to actor j and $r_{ij} = 0$ otherwise, $0 < \alpha < 1$ is a coefficient of social influence, and \mathbf{e} is an $n \times 1$ vector of ones.

Katz's measure is consistent with a viewpoint of centralities as total interpersonal effects that transform individual inputs into outputs; it takes into account all the channels of interpersonal influence that have contributed to the interpersonal effect of one actor on another. However, these total effects are not consistent with the formation of consensus since $(\mathbf{I} - \alpha \mathbf{R})^{-1}$ cannot converge to \mathbf{V}_U . Moreover, as Hubbell (1965) has noted, Katz's model has a multiplicative implication; that is, the coefficients in $(\mathbf{I} - \alpha \mathbf{R})^{-1}$ will transform inputs (\mathbf{y}_1) into outputs (\mathbf{y}_∞) such that each actor's output is greater than the actor's input ($\mathbf{y}_\infty - \mathbf{y}_1 > \mathbf{0}$). Such a multiplicative implication is inconsistent with experimental findings on the interpersonal influence process where it appears that the

¹³ In regular and centered \mathbf{W} , \mathbf{V}_U emerges for $\alpha \rightarrow 1$. An approximate \mathbf{V}_U is obtained by setting $\alpha \approx 1$ (e.g., .999) and computing $(\mathbf{I} - \alpha \mathbf{W})^{-1}(1 - \alpha)$; see Implementation for a fuller discussion and the Appendix for an illustration.

final opinions of a group's members are virtually always in the range of their initial opinions (Friedkin and Cook 1990).

Hubbell et al.—Five other measures also are consistent with *TEC*. These measures have in common the assumption that the centrality of an actor is a function of the centralities of those actors with whom the actor has interpersonal relations.

Hubbell (1965) has proposed an index of sociometric status that takes account of both the "status of the chooser and the strength at which he chooses" (p. 382):

$$s_i = e_i + r_{i1}s_1 + r_{i2}s_2 + \dots + r_{in}s_n, \quad (15)$$

where e_i is an exogenous contribution, r_{ij} is the strength at which actor j chooses actor i , and s_j is actor j 's status. Hence, an actor will tend to have high status to the extent that other high-status actors have strong ties to the actor. The matrix question for (15) is

$$\begin{aligned} s &= e + Rs \\ &= (I - R)^{-1}e, \end{aligned}$$

assuming $(I - R)$ is invertible. Hubbell sets the exogenous contributions, e , to a column vector of ones,

$$\begin{aligned} s &= (I - R)^{-1}e \\ &= (I + R + R^2 + R^3 + \dots)e, \end{aligned}$$

so that the measure of an actor's status is computed as a weighted sum of all paths from the members of a network to the actor.

Thus, while Hubbell's index (in its reduced form) appears closely related to the one proposed by Katz (1953), the conceptual foundations are quite different. Hubbell's idea about the social organization of status (15) was to find a more elegant realization in the work of Bonacich (1972a, 1987), Coleman (1973), and Burt (1982).

Bonacich (1972a) starts with a definition of actors' centrality as a function of the centralities of those actors with whom they are related,

$$\lambda c_i = \sum_{j=1}^n r_{ij}c_j, \quad (16)$$

where R is an $n \times n$ matrix of interpersonal relations ($0 \leq r_{ij} \leq 1$) and λ is introduced as a convenience. It follows that the vector of actors' centralities, c , is an eigenvector of R ($\lambda c = Rc$). To assure that these centralities are nonnegative, c is taken as an eigenvector associated with the largest eigenvalue of R . This eigenvector is then normalized (Bonacich 1972b; Mizruchi et al. 1986; Knoke and Burt 1983).

Recently, Bonacich (1987) has proposed a more general form of his

eigenvector measure. Actors' centrality again appears as a function of the centralities of those actors with whom they are related,

$$c_i(\beta, \alpha) = \sum_{j=1}^n (\beta + \alpha c_j) r_{ij}, \quad (17)$$

where α and β are scalars.

Coleman (1973) has defined the power of an actor along the same lines: $p_j = \sum_{k=1}^n p_k r_{kj}$, where p_j is the power of actor j and r_{kj} is the dependency of actor k on actor j . Burt's (1982, p. 35) measure of prestige also is along these lines: p_j is the prestige of actor j and r_{kj} is an interpersonal relation of some sort.

The essential social organization of status that is postulated by Hubbell, Bonacich, Coleman, and Burt can be deduced from the process (1)–(2). Since, for \mathbf{V}_U , total effect centralities are a left eigenvector of \mathbf{W} associated with eigenvalue 1, that is,

$$\mathbf{c}'_{TEC} = \mathbf{c}'_{TEC} \mathbf{W}, \quad (18)$$

it follows that

$$c_{TEC(j)} = \sum_{i=1}^n c_{TEC(i)} w_{ij}. \quad (19)$$

Thus, the process model is consistent with a social organization in which actors are central to the extent that they strongly influence central actors.

Immediate Effects Centrality

Actors with equivalent total effects may vary in the immediacy of their influences. Actors whose effects are transmitted over lengthy sequences of interpersonal influence have less immediate effects than do actors whose effects are transmitted over short sequences of interpersonal influence. Actors with greater immediacy are less dependent on intervening actors.

The immediacy of actor j 's influences on other members of the group are given by the entries in column j of \mathbf{M} as shown in (11). Immediate effects centrality, IEC , is defined as the reciprocal of the mean length of the sequences of interpersonal influence from actor j to other actors in the network:

$$c_{IEC(j)} = \left(\frac{\sum_{i=1}^n m_{ij}}{n-1} \right)^{-1}, \quad i \neq j. \quad (20)$$

The IEC measure takes into account both the lengths and strengths of the sequences of interpersonal influence that connect actors. The larger

the *IEC*, the more rapidly the total effects of an actor tend to emerge from the influence process. The computation of this measure is illustrated in the Appendix.

The *IEC* measure is closely related to closeness-based measures of point centrality (Bavelas 1950; Beauchamp 1965; Sabidussi 1966). Freeman (1979, pp. 224-26) suggests that the best of these measures is the one proposed by Beauchamp (1965) in which actors appear central to the extent that the average distance separating them from other actors is small:

$$c_j = \left(\frac{\sum_{i=1}^n d_{ij}}{n-1} \right)^{-1}, \quad i \neq j, \quad (21)$$

where d_{ij} is the length of the shortest path (geodesic) from actor j to actor i in a network.

Closeness-based measures stem from the ideas of independence and efficiency. The independence idea is that central actors do not need to rely on other actors for influence, while peripheral actors must depend on others as intermediaries. The efficiency idea is that influence of central actors spreads more rapidly throughout a network than does the influence of peripheral actors. The indices follow from the plausible inverse relationship between a path's length and contribution to information and influence flows. The shorter the average distance of an actor to other actors, the more direct and efficient is the actor's impact because fewer intermediaries are involved in the transmissions.

Mediative Effects Centrality

The third measure indicates the extent to which an actor transmits the total effects of other actors. From equation (13),

$$\bar{t}_{(k)j} = \frac{\sum_{i=1}^n t_{(k)ij}}{(n-2)t_{(k)jj}}, \quad i \neq j \neq k, \quad (22)$$

is indicative of the contribution of actor j in transmitting the interpersonal effects of actor k (i.e., $\bar{t}_{(k)j}$ is the ratio of actor j 's transmissions to non-transmissions of actor k 's effects); and

$$c_{MEC(j)} = \frac{\sum_{k=1}^n \bar{t}_{(k)j}}{n-1}, \quad j \neq k, \quad (23)$$

is indicative of the contribution of actor j in transmitting the interpersonal effects of all network members (see the Appendix for an illustration of these computations).

The *MEC* measure is closely related to Freeman's (1979) measure of betweenness centrality. The "betweenness" of an actor is defined as the proportion of all the shortest paths (geodesics) of a network in which the actor is involved as an intervening point:

$$c_j = \sum_{i=1}^n \sum_{k=1}^n \frac{g_{ik(j)}}{g_{ik}}, \quad i \neq j \neq k, \quad (24)$$

where $g_{ik(j)}$ is the number of geodesics from actor k and actor i that involve actor j as an intervening point and g_{ik} is the number of geodesics from actor k to actor i . The rationale for the measure is that actors involved in many of the paths linking other actors have an opportunity to affect the transmissions that occur through these paths. "It is this potential for control," Freeman argues (1979, p. 221), "that defines the centrality of these points."

Complementary Measures

Clearly *TEC*, *IEC*, and *MEC* are not alternative measures of the centrality of an actor. Because the measures are complementary it makes no sense to ask which is the best measure of an actor's position in an influence network (cf. Freeman et al. 1980; Bolland 1988; Knoke and Burt 1983). Each measure addresses a different question about the operation of an influence network. The *TEC* measure indicates the total relative effect of an actor on the other actors of the network; *IEC* indicates the immediacy of an actor's total effects; and *MEC* indicates the extent to which an actor mediates the total effects of other actors.

The measures distinguish (a) the substantive contribution of an actor to other actors' opinions from (b) the structural contribution of an actor as a conduit of other actors' interpersonal effects. The settled opinions of a group need not reflect the initial opinions of actors who are important transmitters of influence or whose immediacy of effects is high. When a group has reached equilibrium, it is an actor's total effect that is the relevant measure of substantive impact. The controlling role of mediating actors is a control over the rapidity with which other actors' total effects are realized. However, given premature termination of the social influence process, it is possible for such processional control to substantively affect the "final" opinions by serving to allocate disproportionate influence to those actors with the highest immediacy.

Table 1 illustrates the three centrality measures in 21 networks that

TABLE 1
CENTRALITY MEASURES FOR ILLUSTRATIVE NETWORKS

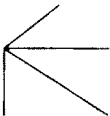
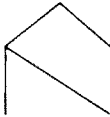
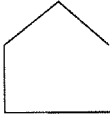
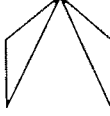
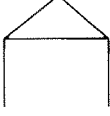

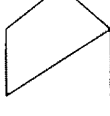
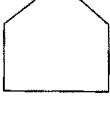
	Network	<i>TEC</i>	<i>IEC</i>	<i>MEC</i>
1.		.154	.080	.375
		.385	.500	1.000
		.154	.080	.375
		.154	.080	.375
		.154	.080	.375
2.		.231	.133	.667
		.308	.250	.875
		.154	.069	.347
		.154	.069	.347
		.154	.056	.264
3.		.231	.105	.625
		.231	.167	.750
		.231	.105	.625
		.154	.050	.250
		.154	.050	.250
4.		.333	.400	.917
		.200	.133	.500
		.200	.133	.500
		.133	.067	.292
		.133	.067	.292
5.		.200	.143	.533
		.267	.222	.742
		.133	.059	.242
		.133	.059	.242
		.267	.222	.742
6.		.200	.105	.450
		.267	.222	.792
		.200	.105	.600
		.133	.045	.208
		.200	.105	.450
7.		.200	.142	.526
		.200	.125	.472
		.200	.142	.526
		.133	.060	.226
		.267	.235	.750
8.		.200	.133	.500
		.200	.133	.500
		.200	.133	.500
		.200	.133	.500
		.200	.133	.500

Table 1 (Continued)

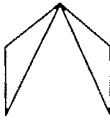
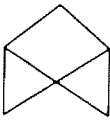
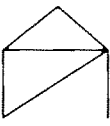
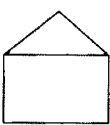
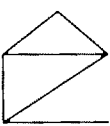
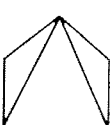
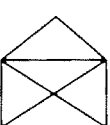
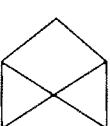
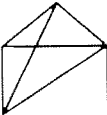
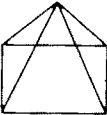
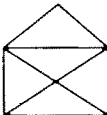
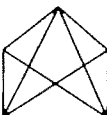
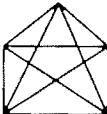
	Network	TBC	IBC	MBC
9		.294	.333	.833
		.176	.109	.417
		.176	.109	.417
		.176	.109	.417
		.176	.109	.417
10		.176	.129	.417
		.235	.214	.625
		.176	.129	.417
		.176	.129	.417
		.235	.214	.625
11.		.176	.125	.431
		.235	.200	.611
		.176	.125	.431
		.118	.057	.209
		.294	.333	.817
12.		.176	.118	.386
		.235	.210	.629
		.176	.120	.428
		.176	.120	.428
		.235	.210	.629
13.		.176	.111	.383
		.235	.199	.624
		.235	.200	.683
		.118	.051	.186
		.235	.199	.624
14.		.263	.286	.714
		.158	.108	.345
		.211	.183	.548
		.211	.183	.548
		.158	.108	.345
15.		.158	.114	.361
		.263	.286	.708
		.158	.114	.361
		.158	.114	.361
		.263	.286	.708
16		.158	.111	.357
		.211	.187	.548
		.211	.185	.523
		.211	.185	.523
		.211	.187	.548

TABLE 1 (Continued)

	Network	TEC	IEC	MEC
17		.210	.178	.528
		.210	.178	.528
		.210	.178	.528
		.105	.050	.167
		.263	.286	.750
18		.238	.250	.619
		.190	.167	.470
		.190	.167	.470
		.190	.167	.470
		.190	.167	.470
19		.143	.100	.302
		.238	.250	.635
		.190	.164	.464
		.190	.164	.464
		.238	.250	.635
20		.217	.222	.560
		.174	.150	.411
		.217	.222	.560
		.217	.222	.560
		.174	.150	.411
21		.200	.200	.500
		.200	.200	.500
		.200	.200	.500
		.200	.200	.500
		.200	.200	.500

NOTE.—The points of these networks are labeled counterclockwise with first points at 12:00. For each network, the diagonal entries of its adjacency matrix $A = [a_{ij}]$ were set to one and its influence network was computed as $W = [w_{ij}] = a_{ij}/\sum_j a_{ij}$.

have appeared in studies of network centrality.¹⁴ These networks include all the connected networks from the population of nonisomorphic symmetric networks with five points. The influence networks were computed as $W = [w_{ij}] = [a_{ij}/\sum_j a_{ij}]$, where $a_{ii} = 1$ and $a_{ij} = 1$ wherever a line exists between two points (see the diagrams in table 1). This specification of W follows French (1956). The *TEC*, *IEC*, and *MEC* measures are

¹⁴ Freeman (1979) employed these networks to illustrate his measures of network centrality. Subsets of the networks appeared in the work of Bavelas (1950) and, more recently, in Stephenson and Zelen (1989). Subsets also appeared in experimental studies of communication networks (Leavitt 1951; Freeman et al. 1980).

restricted to regular networks; such networks do not need to be symmetric, nor do they need to entail the above specification of \mathbf{W} . I have illustrated the measures in the present fashion because the relationship between network structure and point centrality is easiest to apprehend with such baseline networks.

IMPLEMENTATION

In this final section of the article, I deal with three equations that bear on the use of the centrality measures. How might an influence network (\mathbf{W}) be described? When is it proper to set the coefficient of social influence (α) to near unity? How might an empirical estimate of α be obtained?

Influence Networks

Operationalization of the centrality measures requires a stance on the likely content of the influence network, \mathbf{W} . For a suitable matrix (\mathbf{R}) of interpersonal relations, the entries of \mathbf{W} may be computed as

$$w_{ij} = \frac{r_{ij}}{\sum_{j=1}^n r_{ij}}. \quad (25)$$

The interpersonal relations may be simple adjacencies of communication, kinship, or friendship: $r_{ij} = 1$ if actor i is adjacent (i.e., responsive) to actor j and $r_{ij} = 0$ otherwise. This approach follows Katz (1953) and French (1956); it also coincides with conventional methodological practice in handling spatial autocorrelation in multiple regression models (Anselin 1988; Johnston 1984, p. 308).

Alternatively, \mathbf{W} may be described with a more refined theory in which r_{ij} appears as a continuous measure of actors' interdependency. Three examples of such measures will be given.

1. Freeman (1980) has proposed a measure of pair-dependency that stems from his work on point centrality:

$$r_{ij} = \sum_{k=1}^n \frac{g_{ik(j)}}{g_{ik}}, \quad i \neq j \neq k, \quad (26)$$

where g_{ik} is the number of geodesics (shortest paths) from actor i to actor k and $g_{ik(j)}$ is the number of such geodesics that contain actor j as an intervening point. The measure is an "index of the degree to which a particular point must depend upon a specific other—as a relayer of messages—in communicating with all others in the network" (Freeman 1980, p. 587).

2. Another noteworthy approach is the structural equivalence hypothesis of Burt (1982, 1987). Burt's hypothesis is that two actors are responsive to each other to the extent that they occupy similar positions in a social network:

$$r_{ij} = \left[\sum_{k=1}^n [(d_{ik} - d_{jk})^2 + (d_{ki} - d_{kj})^2] \right]^{1/2}, \quad (27)$$

where d_{ij} is an index of the strength of an interpersonal relationship. The index d_{ij} could be a binary measure of adjacency in a communication network, or it could be a more complex measure of tie strength (Burt 1988; Marsden and Campbell 1984; Friedkin 1990).

3. My earlier work (Friedkin 1982, 1983) on information flow and observability of role performance in communication networks indicates support for a simple model of structural accessibility:

$$r_{ij} = 1 - \prod_{k=1}^2 (1 - \rho^k)^{x_k} \quad (28)$$

where $0 < \rho < 1$ and x_k is the number of k -step communication paths connecting actor i and actor j .¹⁵ In terms of theoretical parsimony, this model lies between the adjacency approach of French (1956) and the structural equivalence approach of Burt (1987). It allows for interdependency in the absence of direct communication (cf. French) and gives considerable weight to the number of actors' mutual communication ties (cf. Burt).

Social Structure of Consensus Production

To ascertain the centralities of actors in the production of consensus (e.g., the collective decisions of a group), actors' total effects are computed as

$$\mathbf{V} = \lim_{\alpha \rightarrow 1} (\mathbf{I} - \alpha \mathbf{W})^{-1} (1 - \alpha) = \mathbf{W}^{\infty}, \quad (29)$$

under the condition that \mathbf{W} is a regular network.

For a group that has reached consensus on one or more issues, the centrality scores provide an analysis of the roles of actors in producing

¹⁵ If ρ is the probability that an interpersonal tie will transmit an item of information (e.g., the opinion of an actor), then, if we assume independence, $1 - \rho^k$ is the probability that the information will not be transmitted over a k -step path and $(1 - \rho^k)^{x_k}$ is the probability that not one of x_k independent paths will transmit the information. Hence, the probability that the information will be transmitted by at least one of the one-step or two-step paths connecting actor i and actor j is r_{ij} .

Theoretical Foundations for Centrality Measures

that consensus. For a group that may not have reached consensus, but in which there is a strain toward consensus, the centrality scores describe that particular social structure of status toward which the group is straining.

Estimating the Coefficient of Social Influence

An empirical estimate of α is desirable for an analysis of (a) a group with a history of noteworthy, unresolved disagreements or (b) a group's handling of a particular issue on which noteworthy disagreements remained unresolved. In general, given noteworthy disagreements in a group, there is little warrant for an assumption that the actors have a *coherent* status; their interpersonal effects are likely to be blocked or heterogeneous. A more refined analysis is called for that would describe the pattern of total effects in the group and explain how *particular* actors or subgroups have come to settle on their opinions.

Given data on a subset (X^*) of the exogenous variables that determine group members' initial opinions on an issue or issues, an empirical estimate for α may be obtained with the model

$$y_{\alpha} = \alpha W y_{\alpha} + X^* b^* + u, \quad (30)$$

where X^* is an $n \times k$ matrix of the exogenous variables, b^* is the $k \times 1$ vector of coefficients for these variables, and u is an $n \times 1$ vector of residuals.

This estimation equation, which is a standard mixed regressive-autoregressive model, can be derived from a reduced-form equation of the process model (3): the scalar β is subsumed into b and the matrix of exogenous variables is partitioned into observed and unobserved parts ($Xb = X^*b^* + u$), ideally under the condition $(X^*)'u = 0$. The maximum-likelihood approach for estimating α and b^* is described by Ord (1975); also see Doreian (1981), Cliff and Ord (1981), and Anselin (1988).¹⁶

CONCLUSION

Three measures of actors' network centrality have been derived from an elementary process model of social influence. The measures are closely related to widely used measures of actors' network centrality. Unlike

¹⁶ Anselin (1989) and Friedkin (1989) provide computer software that will estimate the parameters of mixed regressive-autoregressive models. Friedkin's software also will calculate the centrality measures that are reported in this paper. The software is designed for use with the GAUSS system, version 2.0.

previous measures, which have been viewed as competing alternatives, the present measures are complementary and, in their juxtaposition, provide for a rich description of social structure. The complementarity indicates a degree of theoretical unification in the work on network centrality that was heretofore unsuspected.

New light has been cast on the theoretical foundations of an important family of centrality measures. The sociometric status measure of Hubbell (1965), the centrality measures of Bonacich (1972a, 1987), the power measure of Coleman (1973), and the prestige measure of Burt (1982) are based on the tautological definition of status in terms of the status of related others. While the *social organization* of status is precisely formulated in these definitions, the origins of status are left murky.

The present analysis has shown how an actor's status may arise from the flows of interpersonal influence in a network. It has also shown how the essential social organization of status that has been assumed by Hubbell, Bonacich, Coleman, and Burt can be deduced from a micro-level process model of social influence. From the present perspective, the definition of status in terms of other actors' status, while correct, appears less fundamental than the definition of status in terms of an actor's total interpersonal effects.

Coombs reminds us that "a measurement or scaling model is actually a theory about behavior, admittedly on a miniature level, but nevertheless theory" (1964, p. 5). By this criterion, every new proposal of a centrality measure presents new theoretical material. This article offers new theoretical material, but it also may serve to raise the ante in the field by encouraging the construction of somewhat broader theoretical foundations for proposed measures of network centrality.

APPENDIX

This Appendix illustrates the calculation of the proposed centrality measures—*TEC*, *IEC*, and *MEC*. Let

$$W = \begin{bmatrix} \frac{3}{5} & \frac{1}{5} & \frac{1}{5} & 0 & 0 \\ \frac{3}{5} & \frac{1}{5} & 0 & \frac{1}{5} & 0 \\ \frac{3}{8} & \frac{3}{8} & \frac{1}{8} & 0 & \frac{1}{8} \\ 0 & \frac{3}{4} & 0 & \frac{1}{4} & 0 \\ 0 & 0 & \frac{3}{5} & \frac{1}{5} & \frac{1}{5} \end{bmatrix},$$

Theoretical Foundations for Centrality Measures

$$\mathbf{V} = [v_{ij}] = \lim_{\alpha \rightarrow 1} [\mathbf{I} - \alpha \mathbf{W}]^{-1} (1 - \alpha) = \mathbf{W}^\infty$$

$$= \begin{bmatrix} .513 & .260 & .131 & .075 & .021 \\ .513 & .260 & .131 & .075 & .021 \\ .513 & .260 & .131 & .075 & .021 \\ .513 & .260 & .131 & .075 & .021 \\ .513 & .260 & .131 & .075 & .021 \end{bmatrix},$$

and

$$c_{TEC(j)} = \frac{\sum_{i=1}^n v_{ij}}{n-1}, \quad i \neq j.$$

$$\text{Hence, } TEC = [.513 \quad .260 \quad .131 \quad .075 \quad .021]'$$

$$\mathbf{Z} = (\mathbf{I} - \mathbf{W} + \mathbf{W}^\infty)^{-1}$$

$$= \begin{bmatrix} 1.148 & -0.112 & 0.106 & 0.132 & -0.009 \\ 0.064 & 1.005 & -0.171 & 0.154 & -0.052 \\ -0.203 & 0.070 & 1.040 & -0.045 & 0.137 \\ -0.620 & 0.659 & -0.347 & 1.388 & -0.080 \\ -0.949 & -0.108 & 0.529 & 0.220 & 1.307 \end{bmatrix},$$

$$\mathbf{Z}_{di} = \begin{bmatrix} 1.148 & 0 & 0 & 0 & 0 \\ 0 & 1.005 & 0 & 0 & 0 \\ 0 & 0 & 1.040 & 0 & 0 \\ 0 & 0 & 0 & 1.388 & 0 \\ 0 & 0 & 0 & 0 & 1.307 \end{bmatrix},$$

$$\mathbf{D} = [d_{ij}] = \begin{bmatrix} 1.949 & 0 & 0 & 0 & 0 \\ 0 & 3.846 & 0 & 0 & 0 \\ 0 & 0 & 7.611 & 0 & 0 \\ 0 & 0 & 0 & 13.362 & 0 \\ 0 & 0 & 0 & 0 & 48.654 \end{bmatrix},$$

($d_{ii} = 1/v_{ii}$), and \mathbf{E} is an $n \times n$ matrix with all entries equal to one.

$$\mathbf{M} = [m_{ij}] = (\mathbf{I} - \mathbf{Z} + \mathbf{EZ}_{di})\mathbf{D}$$

$$= \begin{bmatrix} 1.948 & 4.298 & 7.111 & 20.316 & 64.104 \\ 2.111 & 3.846 & 9.222 & 16.487 & 66.214 \\ 2.631 & 3.596 & 7.611 & 19.146 & 56.993 \\ 3.444 & 1.333 & 10.555 & 13.365 & 67.548 \\ 4.084 & 4.281 & 3.889 & 15.609 & 48.705 \end{bmatrix},$$

$$c_{IEC(j)} = \left(\frac{\sum_{i=1}^n m_{ij}}{n-1} \right)^{-1}, \quad i \neq j.$$

Hence, $IEC = [.326 \quad .296 \quad .130 \quad .056 \quad .016]'$.

$$\mathbf{T}_{(k)} = [t_{(k)ij}] = (\mathbf{I} - \mathbf{W}_{(k)})^{-1},$$

where $\mathbf{W}_{(k)}$ is a matrix obtained by deleting the k th row and column from \mathbf{W} :

$$\mathbf{T}_{(1)} = \begin{bmatrix} . & . & . & . & . \\ . & 1.667 & 0 & .444 & 0 \\ . & .867 & 1.280 & .284 & .200 \\ . & 1.667 & 0 & 1.778 & 0 \\ . & 1.067 & .960 & .658 & 1.400 \end{bmatrix},$$

$$\mathbf{T}_{(2)} = \begin{bmatrix} 3.289 & . & .843 & .035 & .132 \\ . & . & . & . & . \\ 1.579 & . & 1.684 & .070 & .263 \\ 0 & . & 0 & 1.333 & 0 \\ 1.184 & . & 1.263 & .386 & 1.447 \end{bmatrix},$$

$$\mathbf{T}_{(3)} = \begin{bmatrix} 5 & 1.667 & . & .444 & 0 \\ 5 & 3.333 & . & .889 & 0 \\ . & . & . & . & . \\ 5 & 3.333 & . & 2.222 & 0 \\ 1.250 & .833 & . & .556 & 1.250 \end{bmatrix},$$

$$\mathbf{T}_{(4)} = \begin{bmatrix} 12.195 & 4.512 & 3.122 & . & .488 \\ 9.146 & 4.634 & 2.341 & . & .366 \\ 10.244 & 4.390 & 3.902 & . & .610 \\ . & . & . & . & . \\ 7.683 & 3.293 & 2.927 & . & 1.707 \end{bmatrix},$$

$$\mathbf{T}_{(5)} = \begin{bmatrix} 35 & 16.667 & 8 & 4.444 & . \\ 35 & 18.333 & 8 & 4.889 & . \\ 30 & 15 & 8 & 4 & . \\ 35 & 18.333 & 8 & 6.222 & . \\ . & . & . & . & . \end{bmatrix},$$

and

$$\bar{t}_{(k)j} = \frac{\sum_{i=1}^n t_{(k)ij}}{(n-2)t_{(k)j}}, \quad i \neq j \neq k.$$

For example,

$$\bar{t}_{(2)1} = (1.579 + 1.184)/(3 \cdot 3.289) = .280,$$

$$\bar{t}_{(3)1} = (5 + 5 + 1.250)/(3 \cdot 5) = .750,$$

$$\bar{t}_{(4)1} = (9.146 + 10.244 + 7.683)/(3 \cdot 12.195) = .740,$$

$$\bar{t}_{(5)1} = (35 + 30 + 35)/(3 \cdot 35) = .952,$$

$$\bar{t}_{(1)2} = (.867 + 1.667 + 1.067)/(3 \cdot 1.667) = .720,$$

$$\bar{t}_{(3)2} = (1.667 + 3.333 + .833)/(3 \cdot 3.333) = .583,$$

and so forth.

$$c_{MBC(j)} = \frac{\sum_{k=1}^n \bar{t}_{(k)j}}{n-1}, \quad j \neq k.$$

Hence, $MBC = [.681 \quad .722 \quad .596 \quad .345 \quad .106]'$.

REFERENCES

- Abelson, Robert P. 1964. "Mathematical Models of the Distribution of Attitudes under Controversy." Pp. 142-60 in *Contributions to Mathematical Psychology*, edited by N. Frederiksen and H. Gulliksen. New York: Holt, Rinehart & Winston.
- Alba, Richard A. 1982. "Taking Stock of Network Analysis: A Decade's Results." *Research in the Sociology of Organizations* 1:39-74.
- Anselin, Luc. 1988. *Spatial Econometrics: Methods and Models*. Dordrecht: Kluwer Academic.
- . 1989. "Spatial Regression Analysis on the PC: Spatial Econometrics Using GAUSS." Unpublished manuscript, University of California, Santa Barbara, Department of Geography.
- Barnes, J. A. 1972. *Social Networks*. New York: Addison-Wesley Modular Publications 26.
- Bavelas, Alex. 1948. "A Mathematical Model for Group Structures." *Human Organization* 7:16-30.
- . 1950. "Communication Patterns in Task Oriented Groups." *Journal of the Acoustical Society of America* 22:271-82.
- Beauchamp, Murray A. 1965. "An Improved Index of Centrality." *Behavioral Science* 10:161-63.
- Bolland, John M. 1988. "Sorting Out Centrality: An Analysis of the Performance

- of Four Centrality Models in Real and Simulated Networks." *Social Networks* 10:233-53.
- Bonacich, Phillip. 1972a. "Factoring and Weighting Approaches to Status Scores and Clique Identification." *Journal of Mathematical Sociology* 2:113-20.
- . 1972b. "Technique for Analyzing Overlapping Memberships." Pp. 176-85 in *Sociological Methodology* 1972, edited by H. Costner. San Francisco: Jossey-Bass.
- . 1987. "Power and Centrality: A Family of Measures." *American Journal of Sociology* 92:1170-82.
- Burt, Ronald S. 1982. *Toward a Structural Theory of Action*. New York: Academic Press.
- . 1987. "Social Contagion and Innovation: Cohesion versus Structural Equivalence." *American Journal of Sociology* 92:1287-1335.
- . 1988. "Some Properties of Structural Equivalence Measures Derived from Sociometric Choice Data." *Social Networks* 10:1-28.
- Cartwright, Dorwin. 1971. "Risk Taking by Individuals and Groups: An Assessment of Research Employing Choice Dilemmas." *Journal of Personality and Social Psychology* 20:361-78.
- Cliff, Andrew, and Keith Ord. 1981. *Spatial Processes, Models and Applications*. London: Pion.
- Coleman, James S. 1973. *The Mathematics of Collective Action*. Chicago: Aldine.
- Cook, Karen S., Richard M. Emerson, Mary R. Gillmore, and Toshio Yamagishi. 1983. "The Distribution of Power in Exchange Networks: Theory and Experimental Results." *American Journal of Sociology* 89:275-305.
- Cook, Karen S., Mary R. Gillmore, and Toshio Yamagishi. 1986. "Point and Line Vulnerability as Bases for Predicting the Distribution of Power in Exchange Networks: Reply to Willer." *American Journal of Sociology* 92:445-48.
- Coombs, Clyde H. 1964. *A Theory of Data*. New York: Wiley.
- DeGroot, Morris H. 1974. "Reaching a Consensus." *Journal of the American Statistical Association* 69:118-121.
- Doreian, Patrick. 1981. "Estimating Linear Models with Spatially Distributed Data." Pp. 359-88 in *Sociological Methodology*, edited by S. Leinhardt. San Francisco: Jossey-Bass.
- . 1986. "Measuring Relative Standing in Small Groups and Bounded Social Networks." *Social Psychology Quarterly* 49:247-59.
- Erbring, Lutz, and Alice A. Young. 1979. "Individuals and Social Structure: Contextual Effects as Endogenous Feedback." *Sociological Methods and Research* 7:396-430.
- Festinger, Leon. 1953. "An Analysis of Compliant Behavior." Pp. 232-56 in *Group Relations at the Crossroads*, edited by M. Sherif and M. O. Wilson. New York: Harper.
- Freeman, Linton C. 1979. "Centrality in Social Networks: Conceptual Clarification." *Social Networks* 1:215-39.
- . 1980. "The Gatekeeper, Pair-Dependency and Structural Centrality." *Quality and Quantity* 14:585-92.
- Freeman, Linton C., Douglas Roeder, and Robert R. Mulholland. 1980. "Centrality in Social Networks: II. Experimental Results." *Social Networks* 2:119-41.
- French, J. R. P., Jr. 1956. "A Formal Theory of Social Power." *Psychological Review* 63:181-94.
- Friedkin, Noah E. 1982. "Information Flow through Strong and Weak Ties in Intraorganizational Social Networks." *Social Networks* 3:273-85.
- . 1983. "Horizons of Observability and Limits of Informal Control in Organizations." *Social Forces* 62:54-77.

Theoretical Foundations for Centrality Measures

- . 1986. "A Formal Theory of Social Power." *Journal of Mathematical Sociology* 12:103–26.
- . 1989. SNAPS (Social Network Analysis Procedures) for GAUSS, Version 1.0. Kent, Wash.: Aptech Systems.
- . 1990. "A Guttman Scale for the Strength of an Interpersonal Tie." *Social Networks* 12:239–52.
- Friedkin, Noah E., and Karen S. Cook. 1990. "Peer Group Influence." *Sociological Methods and Research* 19:122–43.
- Friedkin, Noah E., and Eugene C. Johnsen. 1990. "Social Influence and Opinions." *Journal of Mathematical Sociology* 15:193–206.
- Granovetter, Mark O. 1979. "The Theory-Gap in Social Network Analysis." Pp. 501–18 in *Perspectives on Social Network Research*, edited by P. W. Holland and S. Leinhardt. New York: Academic Press.
- Harary, Frank. 1959. "A Criterion for Unanimity in French's Theory of Social Power." Pp. 168–82 in *Studies in Social Power*, edited by D. Cartwright. Ann Arbor, Mich.: Institute for Social Research.
- Harary, Frank, Robert Z. Norman, and Dorwin Cartwright. 1965. *Structural Models: An Introduction to the Theory of Directed Graphs*. New York: Wiley.
- Horowitz, I. L. 1962. "Consensus, Conflict and Cooperation: A Sociological Inventory." *Social Forces* 41:177–88.
- Hubbell, Charles H. 1965. "An Input-Output Approach to Clique Identification." *Sociometry* 28:377–99.
- Isenberg, Daniel J. 1986. "Group Polarization. A Critical Review and Meta-Analysis." *Journal of Personality and Social Psychology* 50:1141–51.
- Johnston, J. 1984. *Econometric Models*, 3d ed. New York: McGraw-Hill.
- Katz, Leo. 1953. "A New Status Index Derived from Sociometric Analysis." *Psychometrika* 18:39–43.
- Kemeny, John G., and J. Laurie Snell. 1960. *Finite Markov Chains*. Princeton, N.J.: Van Nostrand.
- Knoke, David, and Ronald S. Burt. 1983. "Prominence." Pp. 195–222 in *Applied Network Analysis: A Methodological Introduction*, edited by R. S. Burt and M. J. Minor. Beverly Hills, Calif.: Sage.
- Leavitt, Harold J. 1951. "Some Effects of Certain Communication Patterns on Group Performance." *Journal of Abnormal and Social Psychology* 46:38–50.
- Lehrer, Keith, and Carl Wagner. 1981. *Rational Consensus in Science and Society*. Dordrecht: Reidel.
- Lewin, Kurt. 1951. *Field Theory in Social Science*. New York: Harper.
- Markovsky, Barry, David Willer, and Travis Patton. 1988. "Power Relations in Exchange Networks." *American Sociological Review* 53:220–36.
- Marsden, Peter V. 1983. "Restricted Access in Networks and Models of Power." *American Journal of Sociology* 88:686–717.
- Marsden, Peter V., and Karen E. Campbell. 1984. "Measuring Tie Strength." *Social Forces* 63:482–501.
- Marsden, Peter V., and Edward O. Laumann. 1984. "Mathematical Ideas in Social Structural Analysis." *Journal of Mathematical Sociology* 10:271–94.
- Mizruchi, Mark S., Peter Marjolis, Michael Schwartz, and Beth Mintz. 1986. "Techniques for Disaggregating Centrality Scores in Social Networks." Pp. 26–48 in *Sociological Methodology*, edited by Nancy Tuma. Washington, D.C.: American Sociological Association.
- Ord, Keith. 1975. "Estimation Methods for Models of Spatial Interaction." *Journal of the American Statistical Association* 70:120–26.
- Rogers, Everett M. 1987. "Progress, Problems, and Prospects for Network Research." *Social Networks* 9:285–310.

- Sabidussi, Gert. 1966. "The Centrality Index of a Graph." *Psychometrika* 31:581-603.
- Stephenson, Karen, and Marvin Zelen. 1989 "Rethinking Centrality: Methods and Examples." *Social Networks* 11:1-37.
- Wagner, Carl. 1978. "Consensus through Respect: A Model of Rational Group Decision-making." *Philosophical Studies* 34 335-49.
- Wellman, Barry. 1983. "Network Analysis: Some Basic Principles." Pp. 155-200 in *Sociological Theory 1983*, edited by R. Collins. San Francisco: Jossey-Bass
- Willer, David. 1986. "Vulnerability and the Location of Power Positions: Comment on Cook, Emerson, Gillmore, and Yamagishi." *American Journal of Sociology* 92:441-44.

Sponsoring the Next Generation: Parental Willingness to Pay for Higher Education¹

Lala Carr Steelman
University of South Carolina

Brian Powell
Indiana University

Although sociologists and economists have been widely concerned with parental investment in children, that investment has rarely been examined directly. The Parent Survey of the High School and Beyond data set provides material for examining the traits of parents and children that shape parental payment for higher education. Parents' reported willingness and ability to pay, along with savings for children's future education, are shaped first by total income and the number of children who must share that income. Moreover, parental investment in higher education is increased when the parents themselves received parental financial support, which suggests continuity over generations. Gender of parent and child, academic achievement of child, marital status, education, and educational aspirations have more mixed and weaker effects. These findings cause a rethinking of the mechanisms of intergenerational influence as seen by status-attainment, human capital, and resource-dilution perspectives.

The extent to which parents invest in their children has long been recognized as integral to status attainment. Nevertheless, that investment is rarely examined directly. The dearth of evidence on parental investment in higher education is especially discouraging. With the marked increase in the percentage of youths entering college over the past few decades, college graduation increasingly demarcates the middle class from the working class (Vanneman and Pampel 1977). The role parental investment plays in facilitating college attendance and therefore in sustaining

¹ Preparation of this paper was supported by National Science Foundation grant SES-8508301 to Steelman and a Spencer Fellowship to Powell. We thank Doug Downey, Carl Ek, and Ann Smith for their assistance and the anonymous reviewers for their suggestions. The authors' contributions are equal. Requests for reprints should be sent to Brian Powell, Department of Sociology, Indiana University, Bloomington, Indiana 47405.

class distinctions is considerable (Steelman and Powell 1989). Although the family has relinquished many of its traditional functions, financing a child's higher education is one parental obligation that has not been abdicated. Indeed, the American system of higher education is predicated on the assumption that parents, even those in the lowest income brackets, should shoulder the lion's share of college expenses (Carnegie Commission on Higher Education 1973; Olson and Rosenfeld 1984; Miller 1985).

Despite cultural expectations, all parents may not subscribe to the view that they should subsidize higher education. Instead, financial responsibility may be assigned to two alternative sources: the student or the government. Moreover, how parents act may not necessarily correspond to their philosophy of the parental role. In principle, parents may acknowledge a responsibility as theirs but simultaneously visualize it as something beyond their means, or parents may set limits on the economic sacrifices they are willing to make for children. Whatever factors lessen parents' optimism that they can handle college costs may conversely raise the extent to which they see their children as independently capable of handling collegiate expenses.

In this article, we examine parental investment in higher education in terms of (1) whether parents place primary responsibility for financing a college education on themselves, their children, or the government; (2) parental accounts of their ability and willingness to assist their children and of their children's ability to handle college expenses independently; and (3) how much parents have saved for their child's education. We contend that parental investment varies as a function of parental traits, characteristics of the child, and the number of children in the family.

SOURCES OF VARIATION IN PARENTAL FINANCIAL ASSISTANCE

In hypothesizing which factors should be related to parental investment, we borrow from the human capital tradition (Becker 1964, 1967, 1981; Becker and Tomes 1976; Taubman and Behrman 1986), the status-attainment model (Blau and Duncan 1967; Sewell and Hauser 1976), and the resource-dilution hypothesis (Anastasi 1956; Blake 1989). Advanced by economists, human capital theory investigates the investments, sacrifices, bequests, and time inputs that parents make on behalf of their children. Unlike the conceptualization of the child as an economic liability that does nothing but consume, the human capital model sees the child as an investment. According to this perspective, parents, who operate in a rational mode, calculate expected pecuniary and nonpecuniary returns on investments in children. Resources are then vested in ways that maximize the probability of future payoffs. How many resources parents can dole out to children is contingent on familial assets and the number of

claimants in the family entitled to them. Parental investment is further affected by the degree to which any child exhibits promise, or what human capitalists call "genetic endowments."

Although recent studies have attempted to correct the "cultural myopia" that characterizes human capital research by examining cross-cultural heterogeneity in parental investment in children (Brinton 1988, p. 305), we contend that the study of parental investment in the United States is far from complete. College funding is a case in point. Since human capital theorists have worked hard to specify the returns on higher education (Blaug 1976), it is puzzling that the factors affecting parental financial aid for college remain virtually untested. Only by directly examining parental attitudes and behavior toward their responsibility in assisting children can researchers go to the heart of the human capital argument.

The status-attainment model may well represent the most commonly used paradigm in the sociological literature. It accounts for socioeconomic success as a function of an individual's family background, aspirations, level of ability, and other intervening social-psychological factors (Blau and Duncan 1967; Featherman and Hauser 1978). While this model has been replicated extensively with particular attention paid to parental aspirations and encouragement, the explicit link between family background and parental financial support has been overlooked.

The commonality between the status-attainment model and the human capital perspective is readily apparent: both emphasize socioeconomic background, the number of children in the family, and characteristics of the child. The difference lies in the interpretation of the status-attainment process. The "Wisconsin school" stresses social-psychological factors, such as parents' educational aspirations for their children, as intervening factors between socioeconomic background and success in contrast to the rational calculation of returns on investments emphasized by human capitalists. Although our research cannot arbitrate between these two major theoretical perspectives, we can, at the very least, test some implications of these interpretations as they pertain to parental responsibility.

The last perspective guiding this research is the resource-dilution hypothesis that focuses on the nexus between sibship size and resource distribution (Blake 1989; Anastasi 1956). Although sibship size is acknowledged in sociological research as a predictor of various status outcomes, it is rarely brought to the forefront. This is regrettable because of the consistently found detrimental effect of sibship on educational output. The resource-dilution hypothesis, in contrast, highlights the role of sibship size. According to this perspective, it is not just the absolute level of resources a family commands that is important, but also the number of members among whom these resources are to be divided. The

more children in the family, the fewer the resources—whether intellectual, social/interactional, or economic—that can accrue to any given child. In turn, educational advancement is increasingly put in jeopardy as families expand in size.

Despite its intuitive appeal, this hypothesis is routinely posed in an ad hoc fashion as opposed to being tested directly. This hypothesis can also be criticized for not outlining the relative influences of various kinds of resources on children. The limited research gauging the effect of family size on parental allocation of resources has centered almost exclusively on social/interactional inputs such as the time spent with children (Liebowitz 1974, 1977). Economic resources have been neglected, perhaps because research in the area typically assesses how sibship size molds the initiating of ability in early childhood. Although social/interactional resources may be pivotal in childhood and early adolescence, the primacy of economic resources may surface in late adolescence when decisions about college are reached.

The human capital, status-attainment, and resource-dilution perspectives guide us in identifying three sets of variables that may be linked to parental investment: characteristics of the parent, traits of the child, and structure of the sibship.

Characteristics of the Parent

Parents in higher income brackets should more freely endorse and take responsibility for college support than their less financially secure counterparts. The reasoning here is simple: individuals with resources can accept financial responsibility without considerable risk. This expectation is consonant with the status-attainment literature that documents a strong link between parental income and educational attainment. It also squares with the human capital argument that investments in children are based on a rational calculation of potential financial returns (i.e., increased earnings of child resulting from increased education) against college costs incurred. Parents with less at stake economically will more readily bestow resources for higher education than those who potentially face financial difficulties.

According to status-attainment research, individual success is partly contingent on parental SES and aspirations. Parents with more education may place a higher premium on parental assistance than their less well educated peers. As parental aspirations have been shown to be directly linked to college enrollment and eventual educational attainment, we posit that the stronger the parental desire for a child's educational advancement, the greater the parental acceptance and assumption of responsibility.

Marital status of the parent also may color his or her views and behaviors. Unmarried parents may exhibit and endorse less financial responsibility for their children's education. A single-parent household will have financial constraints not typically encountered by a two-parent household, even when family income is held constant. Change in marital status, whatever the cause (death, divorce), entails financial losses not captured entirely by income. When we use human capital reasoning, we find that the sacrifice to support a college education may be viewed as less tenable in a single-parent than in a two-parent household.

We also include two parental characteristics that are not as clearly derivable from the human capital, status-attainment, or resource-dilution models: sex of the parent and whether parents received financial support for their education from their parents.

Sex of the parent may alter attitudes toward parental responsibility. Human capital theory suggests that mothers should be more inclined to invest in children because women, on the average, have a longer life expectancy than men and therefore have more to gain in the long run by sacrificing for their children's education. Cultural-normative explanations produce competing predictions. If mothers have a unique and closer bond to their children than do fathers, women may be more willing than men to make considerable financial sacrifices. Conversely, if females have greater confidence in the government, they may be more inclined than males to look to it for financial assistance. Norms emphasizing independence among males may manifest themselves in one or two polar directions. Fathers may believe that they are financially capable to cover college costs without outside assistance or that children can and should handle college expenses on their own.

Among parents who pursued higher education themselves, their own experience in educational funding may affect willingness to sponsor their children. Although this variable could be seen as a logical extension of the status-attainment model, it may also be couched in cultural-normative terms. Parents who have been aided by their parents may feel duty bound to provide the same type of assistance they have received. Instead of conventionally predicting a child's life chances as dependent only on the more immediate nuclear family situation, we predict a "transmission" effect that cuts across generations in which parents support their children in a way similar to the way their own parents treated them.

Traits of the Child

Parental responsibility may additionally be influenced by the academic talents and sex of the child. Status-attainment research indicates that academic performance presumably influences educational aspirations of

parents and youths and, in turn, the likelihood of college attendance. If we extend this logic, we find that parental propensity to invest in children's college education should be based in part on academic achievement. The effect of achievement may occur indirectly via parental aspirations or may have a direct effect, net of aspirations. The human capital perspective uses academic achievement to gauge "endowments." It contends that parents more readily make monetary sacrifices if their children demonstrate academic prowess because that enhances the odds of financial dividends on college investments.

The projected effects of the youth's sex are not altogether clear. On the one hand, parents may hold sons more accountable than daughters for college expenses. Parents may believe that sons should be more independent than daughters or that sons can be more independent because it is easier for them to get jobs to pay for college. On the other hand, according to human capital rationale, if the expected pecuniary returns on education are lower for females than males, then parents may be less disposed to subsidize their daughter's than their son's education.

Cross-cultural studies chronicle parental investments along gender lines. Brinton (1988) found that Japanese parents were more likely to aspire to a university education for their sons than for daughters. Although she did not explicitly test for sex differences in financial investments in education, she found that nearly all *ronin* students, that is, students who stay out of a school for a year to study for the comprehensive university entrance examinations, are male. That *ronin* students are typically subsidized by their parents implies a greater willingness for parents to invest more heavily in the educational training of sons. Brinton traces this pattern partly to the wide gender gap in earnings and the deeply embedded norm that sons will provide for aging parents. Greenhalgh's (1985) study of post-World War II Taiwan revealed a similar son preference, with parents investing minimal resources in their daughters and, in turn, recycling daughters' wages to subsidize the educational attainment of sons. She attributed this form of parental favoritism to sons' lifelong contractual obligation to their parents as opposed to daughters' shifting their allegiance to their husbands. The large gender gap in earnings potential in the United States, although more modest than in Japan, endures. However, other factors that motivate Asian parents to favor sons, such as sex differences in filial obligations, may not be operative in the United States. Whether U.S. parental investment along gender lines parallels the Asian experience remains to be seen.

Sibship Structure

Finally, the structure of the sibship may elicit differential response from parents. We consider two structural parameters of the sibship: size and

ordinal position. As size increases, the amount of resources for each family member declines and, accordingly, parents should take less responsibility for college expenditures. This prediction fits into the rubric of the status-attainment and human capital orientations and more explicitly corresponds with the resource-dilution hypothesis.

An examination of the effect of being an early born (i.e., having few or no older siblings and more younger siblings) versus a later born (i.e., having more older siblings than younger siblings) may prove useful. If parents hold greater aspirations or affective preferences for elder borns, parental responsibility for earlier born children may be heightened. Moreover, according to human capital theorists, parents may invest more in earlier born than in later born children because expected dividends should materialize sooner. Indeed, Greenhalgh (1985) noted not only a preference for sons in Taiwan but also parental favoritism to the first-born. Alternatively, but also in consistency with the human capital argument, later born children may reach college age at a more opportune time in the family life cycle with respect to the availability of parental financial resources.

DATA AND METHODS

Data

We use the Parent Survey of the High School and Beyond data set to investigate the effects of parental, student, and sibship characteristics on parental responsibility in funding postsecondary education. An underutilized, lesser known part of the High School and Beyond study, the Parent Survey was collected by NORC under the auspices of the National Center for Educational Statistics (for examples of the use of other sections of High School and Beyond, see Heyns and Hilton [1982]; Lee and Byrk 1988). The Parent Survey is the only data set we located that provides adequate information on family background and asks questions about parents' financial responsibility to their college-age children.

The first wave of High School and Beyond was administered to almost 60,000 high school seniors and sophomores in early 1980. A sample of these students' parents (3,600 parents of sophomores and 3,600 parents of seniors) was drawn. In the fall of 1980, these parents were surveyed via mail with a follow-up interview for nonrespondents, which together resulted in a 91% completion rate. We analyze only the parents of seniors because several key variables (e.g., parental willingness to go into debt) were not asked the sophomores' parents and because the issue of college funding should be of greater immediacy to the parents of seniors. Exclusion of missing values and the limitation of the sample to biological or

adoptive parents (excluding stepparents, guardians, grandparents, and others), decreases the number of cases from 3,197 to 2,327.² Although our discussion focuses on these parents, results of supplementary analyses, in which we restrict our sample to parents of children attending college, are also displayed in the tables below.³

Operational Definitions

Table 1 presents brief descriptions, weighted means, and standard deviations of the endogenous and exogenous variables. We focus on three dimensions of parental responsibility. The first asks parents where they place "the MAIN responsibility for the cost of education beyond high school." Parental options include the student, the parents, and the state or federal government. This measure represents a general view of financial responsibility because it is not specifically geared to the family or child in question.

The second cluster of questions centers around parental judgments of their specific financial situation. We use four items: whether parents agree that "we can pay for our son's/daughter's further education without getting outside finances"; whether parents "see any way of getting enough money to allow my son/daughter to get more education"; whether "the family is not willing to go into debt for schooling"; and whether their "son/daughter will be able to earn all the money he/she will need for schooling beyond high school." The dichotomous responses were recoded so that greater acceptance of parental obligations was coded as 1.

The third class of questions taps specific parental behavior as measured by how much parents report having saved for their child's education. This variable is based on two questions: one asks, "Did you or your spouse do anything specific in order to have some money for this child's

² The bulk of the missing cases comes from two sources. our restriction to biological parents (a reduction of 178 cases) and the large number of parents who responded "don't know" to the question, "Who should have the MAIN responsibility for the cost of education beyond high school?" (an additional loss of 470 cases). To check for the consequences of the missing values, we also conducted pairwise and mean substitution procedures, when applicable. The direction and magnitude of the patterns presented in this paper, which are based on listwise procedures, are consistent with the alternative procedures.

³ We tried three alternative sample restrictions. (a) parents who wanted their children to acquire some form of postsecondary education, who made up 95% of all parents, (b) parents who wanted their child to acquire a college degree; and (c) parents whose children wanted to go beyond high school. All three restrictions yield results analogous to those reported here.

education after high school?" the other asks, "About how much money did you set aside for your son's/daughter's future educational needs?" (measured in six broad categories and scaled in dollars at the midpoints of the categories).

The independent variables in our analyses include characteristics of the parent, the student, and the sibship. Parental factors are education (coded from "less than high school" to "postbaccalaureate degree"),⁴ family income (in thousands of dollars logged),⁵ sex,⁶ marital status,⁷ and the educational level that the parents aspire to for their child.⁸ In analyses limited to parents who attended college, we also test for the effects of whether their parents had financially assisted their education. Student traits are sex and academic ability, the latter measured by whether the

⁴ Because we are interested in the effects of marital status and because unmarried parents were not questioned about the other parent's education, we opted to include the education of the surveyed parents only. In supplementary analyses including the education information of both parents, the education of the person not interviewed had a weaker effect and produced little improvement in the fit of the models. Moreover, the magnitude of the effects of the remaining exogenous variables was unaltered.

⁵ Parental income was estimated by the sum of "wages, salary, commissions, or tips from all jobs" and income received "from working on his/her own business or farm" from both parents. Alternative estimates of parental income (both logged and non-logged) yield parallel conclusions.

⁶ Although the original intent of the Parent Survey was to reach mothers rather than fathers, approximately 35% of the parents interviewed were fathers. Our figure is slightly higher, which results primarily from our exclusion of stepparents, grandparents, and guardians and in part from missing values (e.g., women were less likely to offer information on financial matters).

⁷ We have analyzed several interactions, including the interaction between marital status and sex. The inclusion of this interaction does not yield a significant improvement in any of our models, suggesting that the effects of marital status and sex are essentially additive.

⁸ The choice of parental aspirations creates a timing problem in that parents were surveyed in the fall of 1980, i.e., after their children should have graduated from high school. We caution the reader that aspirations may have been conditioned by whether their children graduated from high school or attended college. However, we performed several supplementary analyses. First, we excluded parental aspirations from the model. The variables we are most interested in (income, sibship structure, and financial support received by parents) remain significant. Second, we examined the effects of youths' aspirations, both as estimated by parents and as reported by students. Although each measure is remarkably similar, we favor the use of parental aspirations because it is most compatible with the theoretical justification (especially human capital theory) of this research. Third, because it can be viewed as an intervening factor, parental aspiration was regressed on the other variables. We find strong positive effects of test scores, tracking, parental education, and family income and negative effects of being single and the child's being female. Thus, some of the effects of these variables may be indirectly channeled to the endogenous variables via educational aspirations.

TABLE 1
VARIABLES, DESCRIPTIONS, MEANS, AND STANDARD DEVIATIONS

Variable	Description	Mean	Standard Deviation
Family income	In thousands of dollars (logged)	2.92	1.30
Parent's education	Less than high school = 1; high school degree = 2; some postsecondary education = 3, college degree = 4, post-baccalaureate degree = 5	2.65	1.13
Unmarried parent	Single, widowed, divorced, or separated = 1	.18	.38
Female parent	Female = 1	.60	.49
Female student	Female = 1	.53	.50
Test score	Sum of standardized verbal and math tests (100-point scale)	50.64	8.14
Academic track	Academic track = 1	.41	.49
Desired education	Educational level parent wants his/her child to achieve: less than high school = 1, high school degree = 2, some postsecondary education = 3, college degree = 4; post-baccalaureate degree = 5	3.79	.84
Siblings size	No. of siblings + 1	4.01	2.22
Ordinal position	(No. of siblings older than student + 1)/siblings size	.69	.27
Financial support received by parents	How parent paid for his/her own education beyond high school ("My parents paid for it" = 1)	.42	.49

Student's responsibility .....	.27	.45
Parent's responsibility .....	.55	.50
Government's responsibility	18	.38
Parent able to pay .....	.26	.44
No financial barrier to postsecondary education	80	.39
Parent willing to go into debt .....	.67	.47
Student unable to pay	86	.35
Savings	1,612.11	3,403.71
Savings greater than 0	4,541.05	4,406.16

NOTE.—Means and standard deviations of the independent variables will vary slightly as a function of the dependent variable being estimated. Means and standard deviations of the independent variables presented here are those obtained when estimating savings.

student was placed in an academic track in high school⁹ and by performance on a standardized test constructed by the Educational Testing Service.¹⁰ We use the mean of the five verbal and math sections of the exam (standardized to a mean of approximately 50). Student traits are used in all models except those predicting general responsibility. We also examine the effect of sibship size (number of children)¹¹ and ordinal position, which, to compensate for varying sibship sizes, is divided by sibship size.¹²

RESULTS

We first consider what factors cause parents to conclude that they, their children, or the government should bear the primary responsibility for funding a college education. With responses trichotomized among parents', student's and government's responsibility, we use a multinomial logit analysis with two sets of logistic parameters—first comparing student responsibility and then that of the government with parental responsibility (see Fienberg 1980; Manski 1980; Maddala 1983).

The most notable feature of the parameter estimates is the effect of

⁹ We also tested whether attendance in a private secondary school (first, Catholic schools, and then, all private schools) increased parental responsibility. It could be posited that parents who already provided financial support for their children to attend a private school should be predisposed to continue this support in college. We find no such effect.

¹⁰ In additional analyses using parent-reported grades in lieu of test scores, grades had even less effect than test scores. The use of grades has one advantage—parents may or may not be aware of test scores, whereas student grades are estimated by the parents. We, however, opt for test scores because they are more reliable, normally distributed, and not school-specific.

¹¹ The Parent Survey of High School and Beyond reports a few cases of unlikely family sizes (i.e., sibships exceeding 12) and a large average sibship size of approximately 4. As recommended by one reviewer, we have "trimmed" the large sibship sizes by recoding values exceeding 12 as 12. The effects of sibship size remain essentially the same whether or not these values are trimmed. Although the large sibship size appears inconsistent with the contemporary trend toward smaller families, one should bear in mind that we are using average sibship size per child, not per family unit. Indeed, Preston (1976) illustrates that the mean number of children that had been born to women who were past their childbearing years in 1940 was 2.6; in contrast, the average sibship size of their children was 5.2.

¹² In calculating ordinal position, we use total number of children as the denominator, in contrast to the "trimmed" number of children. Alternative measures of sibling configuration considered are the number of older siblings vs. the number of younger siblings, the ratio of older to younger siblings, the number of older siblings minus younger siblings, income per sibling, and income per younger sibling. We also included a dummy variable for only borns, because only borns are in the unique position of being a last born and a firstborn simultaneously. These measures yield findings consistent with those reported here.

sibship size, the magnitude of which exceeds that of any other variable introduced in the equations. As sibship sizes increase, parents' responsibility is increasingly deflected onto students. To illustrate, in estimates in the equation where all other variables are set at the mean, parents with only one child are nearly four times more likely (.65 to .17) to believe that parents rather than children should be accountable for funding education. In contrast, parents with nine children are slightly less likely (.38 to .44) to place responsibility on the parent than on the child.

Despite the somewhat mixed pattern of findings, the overall relationships seem clear. As parental resources increase, so, too, do attributions of parental responsibility. Parents with more education, greater educational aspirations, and fewer children are more likely to believe that children should be relieved of financial responsibility by their parents (table 2, col. 1). Although no subgroup sees government as more responsible than parents for funding college, those who are single and with less income and education are more likely than their married and advantaged counterparts to assign responsibility to the government (table 2, col. 2).

Four items concerned with the financing of a specific child's education increase our understanding of parental investment (table 3). As expected, parental resources are very important. Parents more likely see themselves as capable of paying "for our son's/daughter's future education without getting any outside finances" (table 3, col. 1) when they have more income, have fewer children overall *and* fewer children younger than the child in question, are currently married, are male, and possess more education. To provide some idea of the magnitudes involved, the logistic regression coefficients imply that the odds of being able to pay are decreased by 57% if the parent is unmarried, by 21% if the parent is female, and by 14% for each additional child. In short, these are sizable effects. It is only these resource-related characteristics that matter—other attitudinal characteristics and characteristics of the child are unimportant.

Similarly, parental prognostications as to whether they "see any way of getting enough money to allow my son/daughter to get more education" are highly related to family resources (table 3, col. 2). Parents with more education, greater income, fewer children, *and* fewer children younger than the child in question express more optimism. The only non-resource-related item of note is test scores—parents of high-scoring children are less likely to perceive financial obstacles. This finding, although consistent with human capital theory, may alternatively reflect that parents see their academically talented children as being more able to secure loans and scholarships, thus increasing parental ability to pay the remaining educational expenditures.

It may be unsurprising that the presence of family resources increases perceived ability to pay or perceived absence of financial barriers to

TABLE 2
COLLEGE FUNDING RESPONSIBILITY BY BACKGROUND CHARACTERISTICS (Multinomial Logit Regression Estimates)

VARIABLE	ALL PARENTS		PARENTS OF CHILDREN ATTENDING COLLEGE	
	Parent's Responsibility/ Student's Responsibility	Parent's Responsibility/ Government's Responsibility	Parent's Responsibility/ Student's Responsibility	Parent's Responsibility/ Government's Responsibility
Family income	-.003 (.044)	.116** (.045)	.012 (.068)	.106 (.064)
Parent's education . . . . .	.107* (.050)	.218*** (.055)	.114 (.070)	.306*** (.071)
Unmarried parent	-.007 (.152)	-.496*** (.151)	-.250 (.237)	-.541* (.225)
Female parent	-.092 (.109)	.128 (.123)	-.060 (.166)	.331 (.170)
Desired education . . . . .	.336*** (.065)	-.097 (.070)	.242 (.125)	-.316* (.130)
Siblings size	-.184*** (.024)	-.065* (.027)	-.195*** (.035)	-.052 (.039)
Constant . . . . .	.037	.825	.693	1.488
$(L^2_0 - L^2_1)/L^2_0$ . . . . .		.039		.045
N		2,327		1,191

NOTE.—SEs are in parentheses

* $P < .05$

** $P < .01$

*** $P < .001$

TABLE 3

PARENTAL ASSESSMENT OF CURRENT FINANCIAL RESPONSIBILITY TO CHILD BY SELECTED CHARACTERISTICS (Logistic Regression Coefficients)

VARIABLE	ALL PARENTS				PARENTS OF CHILDREN ATTENDING COLLEGE			
	Parent Able to Pay	No Financial Barrier to Education	Parent Willing to Go into Debt	Student Unable to Pay	Parent Able to Pay	No Financial Barrier to Education	Parent Willing to Go into Debt	Student Unable to Pay
Family income .....	.308*** (.057)	.220*** (.044)	.096* (.039)	-.050 (.055)	.348*** (.079)	.205*** (.076)	.097 (.059)	.019 (.098)
Parent's education .....	.175*** (.052)	.376*** (.062)	.102* (.047)	.163* (.067)	.168*** (.064)	.287*** (.093)	.253*** (.064)	.111 (.102)
Unmarried parent	-.854*** (.198)	-.234 (.153)	-.171 (.130)	.111 (.190)	-.509* (.249)	-.240 (.270)	-.278 (.198)	- .115 (.336)
Female parent	-.232* (.109)	-.018 (.128)	-.151 (.100)	.121 (.137)	-.256 (.145)	.180 (.214)	-.192 (.145)	.492* (.237)
Desired education	-.126 (.075)	.056 (.075)	.282*** (.064)	.454*** (.090)	-.322*** (.120)	.012 (.156)	.425*** (.113)	.365* (.180)
Female student .....	.165 (.105)	.110 (.114)	-.051 (.092)	.328** (.126)	.192 (.143)	.116 (.200)	-.297* (.140)	.362 (.224)
Test score ....	.012 (.008)	.040*** (.009)	-.012 (.006)	.008 (.010)	.010 (.010)	.025 (.014)	-.025* (.010)	.027 (.016)
Academic track	-.086 (.124)	.267 (.141)	.003 (.110)	.219 (.159)	-.170 (.156)	.217 (.211)	.007 (.150)	.293 (.239)
Sibship size	-.148*** (.028)	-.062* (.024)	-.068*** (.020)	-.015 (.028)	-.160*** (.039)	-.081* (.042)	-.063* (.032)	-.015 (.051)
Ordinal position .....	.793*** (.201)	.238* (.115)	-.164 (.173)	.295 (.241)	.868*** (.269)	.107 (.373)	.038 (.257)	-.460 (.426)
Constant	-2.441	-2.261	.153	-.592	-1.456	-.674	-.116	-1.124
$(L^2 - L)/L^2$ ....	.087	.114	.028	.048	.087	.066	.049	.037
N	2,295	2,295	2,295	2,295	1,124	1,124	1,124	1,124

NOTE.—SEs are in parentheses

* $P < .05$.** $P < .01$ *** $P < .001$.

higher education. Perhaps more telling is the parents' willingness to go into debt for their child's education (table 3, col. 3). Resources remain important—parents with more education and income, those who are married, and those with fewer children to share their income are more willing to assume debt. However, although parents find younger children, that is, those of high school age and below, the greater drain on ability to pay and a greater obstacle to financing college (table 3, cols. 1 and 2), parents do not report a greater willingness to go into debt when their younger children reach college age. Educational aspirations influence parental willingness to go into debt, whereas, once again, student traits have mixed effects. For all parents, student characteristics do not influence their willingness to go into debt. However, for those whose child has entered college (col. 7), parents are more willing to assume debt when the child is male and, in contrast to expectations from human capital and status-attainment perspectives, when the child's test scores are low. This counterintuitive pattern may reflect parental willingness to sacrifice for their children when children cannot, by virtue of low test scores or grades, garner scholarship support.

Parental attitudes and the sex of the child play a more prominent role in whether parents believe their child is "able to earn all the money he/she will need for schooling beyond high school." Parents with more education, with higher educational aspirations for a child, and with daughters see their children as less financially independent (table 3, col. 4). It is interesting that parental perception of the student's ability to pay is the sole dependent variable for the total sample in which the student's sex has any significant direct effect. Except for education, parental resources are only nominally related to this item.

Table 4 analyzes actual parental financial responsibility, specifically, savings accumulated for the child. An examination of savings reveals a concentration of observations at zero dollars. To correct for these floor effects, we employ a Tobit (censored regression) model, which considers not only the likelihood but also the amount of savings (see Tobin [1958], Ameniya [1981], and Maddala [1983] for a detailed discussion of Tobit models).¹³

The Tobit coefficients indicate a strong positive relationship between parental savings and parental education, educational aspirations for chil-

¹³ In addition to the analyses reported in table 5, we also have used logistic regression and OLS regression to estimate the likelihood and amount of savings, respectively. Unexpectedly, a nontrivial number of parents (33%) whose children were not attending college had saved money for their children's education (in contrast to 53% of parents whose children were enrolled in college). A nearly equal percentage, 29%, of parents who did not aspire for their children to attain a college degree had saved money for their children's education.

TABLE 4
SAVINGS BY SELECTED CHARACTERISTICS (Tobit Coefficients)

Variable	All Parents	Parents of Children Attending College
Family income	745.11*** (156.39)	926.50*** (214.87)
Parent's education	1,383.11*** (239.67)	1,239.10*** (204.06)
Unmarried parent	-2,416.30*** (534.78)	-1,544.70* (713.94)
Female parent	-205.15 (354.77)	292.94 (469.95)
Desired education	984.71*** (239.67)	139.72 (382.76)
Female student	-219.45 (334.46)	-363.45 (451.60)
Test score	43.16 (24.80)	93.55** (32.63)
Academic track	792.14* (393.18)	778.56 (502.28)
Sibship size	-326.98*** (81.91)	-338.86*** (111.32)
Ordinal position	2,029.20** (633.53)	2,472.83** (845.22)
Constant	-14,285.00	-13,802.70
N	2,295	1,167

NOTE: —SEs are in parentheses.

* $P < .05$.

** $P < .01$.

*** $P < .001$.

dren, and familial income. Students from single-parent households are especially disadvantaged, as are those with many siblings. Later born students have a distinct financial edge over early borns. Although placement in academic tracking is linked to parental savings, the effect of the student's sex and test scores is slight.

Finally, we ask whether the way that parents funded their own education affects any of the aforementioned endogenous variables. Confining our analysis to parents who advanced beyond a high school education, we test whether perceptions of responsibility and actual saving behavior are altered by whether the parents in fact received financial assistance from their parents. In general, we found support for this prediction. We show in table 5 that, for parents who were financially supported by their parents, the odds of placing financial responsibility on parents instead of students are increased by over 130% and the odds of emphasizing par-

TABLE 5
TOBIT AND LOGIT ESTIMATES OF THE EFFECT OF FINANCIAL SUPPORT RECEIVED BY PARENTS FROM THEIR PARENTS

	Parent's/Student's Responsibility ^a	Parent's/Government's Responsibility ^a	No Financial Barrier to			Savings ^b
			Parent Able to Pay ^b	Postsecondary Education ^b	Parent Willing to Go into Debt ^b	
Effect of support .....	.833*** (.163)	.574** (.179)	.437** (.148)	174 (209)	100 (.144)	1,344.30** (496.61)
N	1,169	1,169	1,123	1,123	1,123	1,136

NOTE.—SEs are in parentheses

^a Adjusted for family income, parent's education, unmarried parent, female parent, desired education, and sibling size.

^b Adjusted for family income, parent's education, unmarried parent, female parent, desired education, female student, test score, academic track, sibling size, and ordinal position.

** $P < .01$

*** $P < .001$

ents' responsibility instead of the government's are increased by 78%. Indeed, the relative influence of this variable on attribution of responsibility is impressive; it is approximately equivalent to the effect of sibship size and exceeds that of every other variable. Similarly, parents who themselves were recipients of parental aid save considerably more for their children. The effects on parental attitudes are not as consistent; only parental views that they can afford to pay for their children's college education is positively linked to whether parents received financial assistance.

DISCUSSION

The consistent and relatively powerful effects of family income, sibship size, and marital status signify that if the family's structure is conducive to helping children, then parents more readily take on this responsibility. These results are deceptively simple. If, however, one of social science's goals is parsimony in explaining social processes, the simplicity of this reasoning should be welcomed. Nonetheless, this streamlined explanation of parental responsibility may profit from an even more delineated inspection of the familial resource base. Income alone may not provide sufficient information to tap economic assets (Rumberger 1983). In our study, for example, the detrimental effect of marital disruption may result from a diminishment of economic assets beyond that detectable from income. More detailed knowledge of the economic contingencies faced by intact and nonintact families may clarify how variation in parental obligations is expressed.

Four variables deserve special comment: sibship size, ordinal position, whether parents received support for college, and sex. Of equal importance to the pool of available resources (i.e., income) is the number of persons who have to share the resources. Most sociological work, especially status-attainment studies, has merely inserted sibship size as a background factor. Yet it is the most powerful predictor of where parents assign responsibility for financing college. Although not related to parents' perception about their child's being able to earn the money necessary for college, sibship size influences every other attitudinal measure employed as well as the amount of savings amassed. Our results echo the sentiments of the resource-dilution theorists that sibship size has not been given the attention it warrants.

Human capital theory clearly is more attentive than the status-attainment model to the connections between number of children, parental obligations, and status outcomes. However, there may be dissent even among human capital theorists about the causal direction of these

variables. Indeed, some might ask whether how many children parents have is the consequence of or a covariate of, rather than the precursor to, their propensity to invest in child quality (in this case, savings for college education). Our data obviously cannot offer an answer because we are relying on current parents' views of their obligations. To settle this issue would require retrospective information on attitudes toward parental investment in college at the time parents were having children. We, however, concur with Blake (1989) that the question above ignores a variety of other factors, such as preferences for "parental quality," parental health and fecundity, religion, additional motivations, and efficacy of birth-control usage, which also come into play in the determination of fertility. Moreover, sibship size exerts a significant effect even with the inclusion of educational aspirations *and* parental background characteristics that, according to Blake, should, at least in part, predict parents' goals for their children and parents' desired family size.

There is an ironic twist to the findings on sibship size. From an industrialization/modernization perspective, modernization coincided with a diminution of familial obligations (Goode 1963). Nevertheless, the declining birth rate, associated with industrialization, that resulted in a decreased family size may have somewhat counteracted this trend. Indeed, parents now can concentrate more heavily on promoting the few children they have. Our conclusions about funding for college illustrate how smaller family size is compatible with greater parental responsibility. Because the human capital model posits that parental investments eventuate in returns from children, a logical extension of our research is to investigate how industrialization, childbearing rates, and sibship size figure into children's obligations to parents. If industrialization has weakened familial ties, then children may feel less obliged to their parents. Moreover, with decreasing family sizes, parents have fewer children to turn to for support. However, according to our results, as the number of children in the family decreases, parental investments, in this case college sponsorship, increase. In turn, children's obligations may intensify in direct proportion to parental investment. Less childbearing also implies that couples, because they are less encumbered with child-rearing duties, are freer to provide for elderly parents. Although variations of and alternatives to these speculations on intergenerational wealth flows and altruism have been made before (Caldwell 1976, 1980; Becker 1981; Willis 1982; Parsons 1984), empirical analysis of these concerns has been scant. Our results and the above propositions underscore the symbiotic relationship between macro-level phenomena and the internal dynamics of the family.

Parents' willingness to go into debt is not directly shaped by ordinal

position and therefore does not support a preference for their earlier born children or rational calculation of earlier returns on investment. However, parents respond that they are better able to finance the later born child's education by themselves or with outside assistance and have actually saved more for that child's education. At the time later born children reach college age, parental income may be at its peak or parental obligations to other dependents may be receding. Thus it appears that opportunity structure, that is, financial wherewithal rather than preference, more profoundly affects college financing decisions, thereby benefiting later born children. Nonetheless, one should be cautious in interpreting these findings because of our reliance on interfamilial data. A more rigorous test of whether birth order constrains familial resource allocation would be an examination of how parents distribute resources among siblings within families rather than across families.

Resources disseminated to parents in their youth also are important. Our results show how advantages may cut across generations—not simply reflect current familial conditions. Parents whose own parents assisted them are more apt to be financially responsible for their children's education. Perhaps these parents were socialized to accept responsibility, or they are emulating their parents' role models. Social scientists should be attuned to a legacy of familial background effects that transcends the current family context and traces back to previous generations.

What sex the child is does not directly alter parental willingness to go into debt for education or the extent to which parents have set aside funds for college. The absence of a sex effect contrasts with patterns found in Taiwan and Japan. In Taiwan and Japan, sons rather than daughters remain under obligation to parents in terms of repayment, working in family-owned businesses or supporting their parents in old age. In the United States, however, there is either no guarantee of reciprocity by sons or daughters; it is daughters, not sons, who are more likely to provide social support to aging parents (Brody 1981; Kagan 1984; Finley 1989). Because there is no future personal gain in favoring males, parents may be indiscriminate in gender and resource allocation. It is interesting that, even though American parents presumably have lower aspirations for daughters than for sons, this is not reflected in responsibility for college funding.

The sex of the child and of the parent do enter into perceptions of ability to pay for college. Our results suggest sex-specific norms of financial independence. Fathers are more confident than mothers about the family's ability to handle college costs, perhaps exemplifying a tendency for males to deny financial vulnerability (David and Brannon 1976). Parents also express less faith in daughters' than in sons' ability to pay for

college; however, this appraisal may not be inaccurate given what women can realistically expect to earn in view of sex differences in income.

Our results provide qualified support and hint at future directions for the human capital, status-attainment, and resource-dilution perspectives. The effects of familial assets and the sibship size square with human capital expectations. Indeed, economists may be more cognizant of the importance of these sheerly contextual factors than sociologists. Some other findings, however, undermine the assumption embodied in this theory that parents are rational in their investments in their children. The fact that over one-half of the parents in this survey do not rule out risking financial security on behalf of their children hardly supports the rationality assumption. Moreover, it is implicit in the logic of human capital that more "endowed" children, that is, males and the academically talented, receive a disproportionate amount of parental investment. Curiously, this proposition has not been tested enough empirically, even though it is a major tenet of the human capital argument. Our data do not offer unequivocal support for the endowment effects. The generally weak effects of gender, track placement, and test scores would disappoint staunch advocates of the human capital perspective. As we have demonstrated, in the few models in which gender or ability exerts an effect, there are convenient explanations for these relationships other than from the human capital perspective. Although the norm of rationality may or may not prevail in the commercial sector, it simply may not operate in parent-child interactions. However, our criticism of the rationality assumption is guarded. Given data on how allocation decisions are made among siblings in the same family, we would have a firmer grasp of whether rationality permeates parental distributive decisions.

Critics and even advocates of the status-attainment model contend that continued work in this area has approached redundancy. To the contrary, our results indicate three areas for further explication of the linkage between familial background and educational outcomes. First, the status-attainment model should benefit from a more thorough examination of the role that sibship structure plays in the acquisition of educational credentials. Second, the model's narrow focus on two generations (i.e., parent to child) should be enhanced by studying familial effects on two generations. Third, the model should take a closer look at parental responsibility, especially as related to funding college. Parental assistance intervenes between familial background (and parental aspirations) and children's educational attainment. Moreover, parental support may partly explain exceptions to the general patterns in the status-attainment model. For example, some poor parents may make heroic sacrifices for their children's education, while some wealthy parents may refuse assistance. Knowing the extent of parental help may reconcile cases that do

not fit the tendency that favors socioeconomically advantaged children in educational advancement.¹⁴

The strengths of the resource-dilution hypothesis lie in its recognition of the theoretical merit of sibship size and its specification of the mechanisms by which sibship size renders its effect. Yet few studies have directly tested this hypothesis. Our study corroborates the size/dilution principle with respect to economic resources. However, it also raises other issues complicating this seemingly straightforward hypothesis. For example, we need to identify the relative effects of economic, social, and interactional resources during the developing child's life span and to see whether these effects cumulate. We also need to ascertain whether youths deprived of resources suffer irreversible damage and whether there are critical junctures at which children more profoundly require certain types of resources. Moreover, we need to determine whether the resource-dilution hypothesis is supported across historical and cultural contexts.

What predictions about parental support and governmental intervention can we extrapolate from our findings? Overall, our results imply an upswing in parental willingness to invest, given the increasing levels of education of future parents, the predominance of small families, and the large percentage of the next generation of parents currently enjoying parental sponsorship. However, how much the increasing number of disrupted families may undermine parental support is difficult to gauge. Even if the scope of parental support widens, college may represent an unaffordable luxury, should inflationary trends in college costs continue.

Our results provide no indication that the impetus for governmental financial support for college education will increase. In fact, our findings hint that governmental obligations may lessen. Demographic profiles of the United States suggest that the proportion of the population that is immediately concerned about college (i.e., families with college-age youths) will shrink. According to our results, there is hesitancy even among this group to consider the government the primary source of financial support for college. The view that the government should be the main source of assistance is not held even by parents with few resources (i.e., families with low income or large sibship size) whose children's educational prospects look bleak. If this is the general impression, it

¹⁴ Coleman (1988) makes a similar observation when discussing parental allocation of social/interactional resources (such as attention) to progeny. He notes that unless the human capital (such as education) enjoyed by the parent is expended on the child, the parent's human capital, no matter how considerable, may prove immaterial to the child's academic growth. He also provides an illustration of the opposite. Asian immigrant parents with low human capital (i.e., few years of formal educational training) who spend an inordinate amount of time doing academic work with their children.

may be difficult to persuade the government to help fund postsecondary education. Without governmental intervention, it would appear that family membership will continue to confer advantages or disadvantages on an individual's college opportunities and therefore on his or her lifetime prospects.

REFERENCES

- Amemiya, Takeshi. 1984. "Tobit Models: A Survey." *Journal of Econometrics* 24:3-61.
- Anastasi, Anne. 1956. "Intelligence and Family Size." *Psychological Reports* 53:187-203.
- Becker, Gary S. 1964. *Human Capital*. New York: National Bureau of Economic Research.
- . 1967. *Human Capital and the Personal Distribution of Incomes*. Ann Arbor: University of Michigan Press.
- . 1981. *A Treatise on the Family*. Cambridge, Mass.: Harvard University Press.
- Becker, Gary S., and Nigel Tomes. 1976. "Child Endowments and the Quantity and Quality of Children." *Journal of Political Economy* 84:S143-S162.
- Blake, Judith. 1989. *Family Size and Achievement*. Berkeley and Los Angeles: University of California Press.
- Blau, Peter, and Otis Dudley Duncan. 1967. *The American Occupational Structure*. New York: Wiley.
- Blaug, Mark. 1976. "The Empirical Status of Human Capital Theory: A Slightly Jaundiced View." *Journal of Economic Literature* 14:817-26.
- Brinton, Mary C. 1988. "The Social-Institutional Bases of Gender Stratification: Japan as an Illustrative Case." *American Journal of Sociology* 94:300-334.
- Brody, Elaine. 1981. "'Women in the Middle' and the Family Help to Older People." *Gerontologist* 26:372-81.
- Caldwell, John C. 1976. "Toward a Restatement of Demographic Transition Theory." *Population and Development Review* 2:321-66.
- . 1980. "Mass Education as a Determinant of the Timing of Fertility Decline." *Population and Development Review* 6:225-55.
- Carnegie Commission on Higher Education. 1973. *Higher Education: Who Pays? Who Benefits? Who Should Pay?* New York: McGraw-Hill.
- Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94:S95-S120.
- David, Deborah S., and Robert Brannon. 1976. *The Forty-Nine Percent Majority*. Reading, Mass.: Addison-Wesley.
- Featherman, David L., and Robert M. Hauser. 1978. *Opportunity and Change*. New York: Academic Press.
- Fienberg, Stephen E. 1980. *The Analysis of Cross-Classified Categorical Data*. Cambridge, Mass.: MIT Press.
- Finley, Nancy. 1989. "Theories of Family Labor as Applied to Gender Differences in Caregiving for Elderly Parents." *Journal of Marriage and the Family* 51:79-86.
- Goode, William J. 1963. *World Revolution and Family Patterns*. New York: Free Press.
- Greenhalgh, Susan. 1985. "Sexual Stratification: The Other Side of 'Growth versus Equity' in East Asia." *Population and Human Development Review* 11:265-314.
- Heyns, Barbara, and Thomas L. Hilton. 1982. "The Cognitive Tests for High School and Beyond: An Assessment." *Sociology of Education* 55:89-102.

- Kagan, Jerome. 1984. *The Nature of the Child*. New York: Basic.
- Lee, Valerie E., and Anthony S. Byrk. 1988. "Curriculum Tracking as Mediating the Social Distribution of High School Achievement." *Sociology of Education* 61:79-94.
- Liebowitz, Arleen. 1974. "Home Investments in Children." *Journal of Political Economy* 82:111-31.
- . 1977. "Parental Inputs and Children's Achievements." *Journal of Human Resources* 12:242-51.
- Maddala, G. S. 1983. *Limited-Dependent and Qualitative Variables in Econometrics*. Cambridge: Cambridge University Press.
- Manaski, C. F. 1980. "Structural Models for Discrete Data: The Analysis of Discrete Choice." Research Report no. 130. Hebrew University of Jerusalem, Department of Economics.
- Miller, Scott. 1985. "College Costs: How Do Families Pay?" *Educational Record* 63:40-43.
- Olson, Lorayn, and Rachel Rosenfeld. 1984. "Parents and the Process of Gaining Access to Student Financial Aid." *Journal of Higher Education* 55:455-80.
- Parsons, Donald O. 1984. "On the Economics of Intergenerational Control." *Population and Development Review* 10:41-54.
- Preston, Samuel H. 1976. "Family Sizes of Children and Family Sizes of Women." *Demography* 32:105-14.
- Rumberger, Russell W. 1983. "The Influence of Family Background on Education, Earnings, and Wealth." *Social Forces* 61:755-73.
- Sewell, William H., and Robert M. Hauser. 1976. "Causes and Consequences of Higher Education: Models of the Status Attainment Process." Pp. 9-28 in *Schooling and Achievement in American Society*, by William H. Sewell, Robert M. Hauser, and David L. Featherman. New York: Academic Press.
- Steelman, Lala Carr, and Brian Powell. 1989. "Acquiring Capital for College: The Constraints of Family Configuration." *American Sociological Review* 54:844-55.
- Taubman, Paul, and Jere R. Behrman. 1986. "Effect of Number and Position of Siblings on Child and Adult Outcomes." *Social Biology* 33:22-33.
- Tobin, James. 1958. "Estimation of Relationship for Limited Dependent Variables." *Econometrics* 26:24-36.
- Vanneman, Reeve, and Fred Pampel. 1977. "The American Perception of Class and Status." *American Sociological Review* 42:422-37.
- Willis, Robert R. 1982. "The Direction of Intergenerational Transfer and Demographic Transition: The Caldwell Hypothesis Reexamined." *Population and Development Review* ("Income Distribution and the Family," edited by Yoram Ben-Porath) 8:S207-S234.

Commentary and Debate

To conserve space for the publication of original contributions to scholarship, the comments in this section must be limited to brief critiques. They are expected to address specific errors or flaws in articles and reviews published in the *AJS*. Comments on articles are not to exceed 1,500 words, those on reviews 750 words. Longer or less narrowly focused critiques should be submitted as articles. Authors of articles and reviews are invited to reply to comments, keeping their replies to the length of the specific comment. The *AJS* does not publish commenters' rebuttals to authors' replies. We reserve the right to reject inappropriate or excessively minor comments.

ASSESSING THE RISK OF INATTENTION TO CLASS, RACE/ ETHNICITY, AND GENDER: COMMENT ON LYNG¹

It is surprising (and ironic) when a Marxist endeavor "to articulate a new approach for understanding voluntary risk taking . . . in an explicit, comprehensive, and systematic form" (*AJS* 95 [January 1990]: 851–86, quote at 882) falls short of these goals because of inattention to class; it is unfortunately still not surprising (but rather, routine) when such an endeavor also falls short because of inattention to race/ethnicity and gender. The latter part of this statement remains accurate despite repeated theoretical elaborations on the part of neo-Marxists and Marxist feminists (I among them) and research evidence fast accumulating, again often produced by those working within a Marxist tradition broadly defined, that attest to the fact that there are dimensions of oppression other than class that are both separate analytically and unique in etiology and functioning.

Stephen Lyng's provocative theorizing on the nature and etiology of "edgework" in postindustrial society is grounded in the author's research on skydiving and his survey of literatures on similar activities. Although

¹ I would like to thank Diane Buelow, Dale Jaffe, Gregory Squires, and John Zipp for comments on an earlier draft.

Permission to reprint a comment printed in this section may be obtained only from the author.

his references include an article on female prostitution, his examples throughout are of risky behaviors that are prototypically male: piloting experimental aircraft, mountain climbing, car racing, engaging in combat, and high-stakes dealing in business. They are also activities that are engaged in primarily by white men with attachment to the labor force, those who by definition are not members of the underclass. This focus, in fact, accounts for the theoretical contribution that is the heart of Lyng's argument: this micro-level analysis is linked to a macro-level speculation on the alienating effects of the world of work in postindustrial capitalism. The result, he posits, is a hyperextension of the individual's experience of the "me" and an associated compression of opportunities to experience the "I." Lyng demonstrates that the impact of the deskilling and bureaucratization of work on the psyche is not confined to the ranks of the blue-collar worker but is pervasive among white-collar workers and service workers as well. It is the shared absence of control experienced in "institutional routines" that makes the heightened sense of control experienced in edgework (even if it is largely illusory) psychologically *necessary* for humans at this particular historical moment.

But what of those whose labor is redundant, who, for all intents and purposes, have never experienced the dulling, dehumanizing world of production for exchange value described by Lyng? Such people, perhaps even more than those that are the grist for this theorizing, would suffer, one might assume, even more acutely "the absence of a fully developed social self (involving not only 'generalized attitudes' but also a broad range of social and economic roles)," that is associated with a less than fully developed ego (p. 870). One could argue that these people, too, experience the alienation Lyng describes whenever they are acted upon (and are forced to act) within the context of the various educational and social service institutions that provide them with the means to survive. In addition, their experience of themselves as "me" is not only expanded under the watchful eye of the welfare state at this particular time in history, but the essence of the generalized attitudes about themselves with which they must construct identities is trivialized and stigmatized. That is, should one not consider the content of "generalized attitudes" along with some quantitative assessment of its scope relative to the "I"? Furthermore, if the underclass would seem to be a fertile group within which to look for evidence of edgework, would not women, by Lyng's own argument, also be such a group? But Lyng does not consider the underclass (racial/ethnic or otherwise), and he argues that "edgework is more common among young people than among older people and among males than among females" (p. 872). Young people, he feels, have an "abiding sense of their own immortality" (p. 872) and are thus particularly susceptible to the illusion of control that is the essence of edgework.

Men, on the other hand, are more likely than women "to have an illusory sense of control over fateful endeavors because of the socialization pressures on males to develop a skill orientation toward their environment." The result is that they also have "a distorted sense of their ability to control fateful circumstances (pp. 872-73). Both of these arguments have an ad hoc quality that stands in sharp contrast to the precision and sophistication that generally characterize the essay. They also seem ill grounded empirically. One immediately is moved to ask: If men have a skill orientation toward the environment, what do women have? And what of the fact that the young have little connection with the world of work? Moreover, do the young more than the adult experience the same social psychological phenomena described by Lyng? The more general point is that Lyng does not know what the edgework of women and/or ethnic minorities and/or the underclass would look like because he did not look for empirical evidence of it. In fact, it was not real for him because of the particular kind of Marxist lens he employed, one that conceptualizes alienation in terms of what many underclass people would take to be the rather privileged (and male) world of paid work within the formal economy. This is not the world of employed women. They experience this world differently from men primarily because the largely sex-segregated jobs within which they labor are structured differently from men's jobs and also because they engage in unpaid labor within their households, where class constraints and contradictions are largely overlaid by those of patriarchy. Moreover, racial/ethnic oppression also has a role in structuring each of those experiences (see, e.g., Statham, Miller, and Mauksch [1987] for varied evidence related to this point). And, of course, it is a world that many poor people in the United States, and many of those poor people are people of color, never experience at all.

The macro level of analysis, then, is the primarily problematic one. Having argued that even this class-conscious analysis is not so class-conscious, I would also like to restate the following. Class oppression is not the only dimension of oppression. Race/ethnicity and gender are analytically separate, but experientially they are often intersecting and mutually constitutive dimensions. These dimensions, too, however, make people experience themselves in less than their full humanity; they produce their own brands of alienation. My past research (see Miller 1986) and current fieldwork on the world of the underclass, predominantly African-American, female street hustlers, leads me to suggest that this group, for example, may engage in edgework to an extent that far exceeds that of working- and middle-class white men. One might argue that, because of their poverty, they are not totally free to engage in risk taking voluntarily, that they are forced by circumstance to hustle the streets,

and that that activity per se is dangerous. This is true, but there are those among them who choose especially risky hustles.

These women engage in elaborate plans to assure the success of their "missions," they speak of those who are successful in maneuvering the dangers of the streets and coming home unscathed as "having the wisdom," they attribute death or injury to the fact that the person in question just "didn't have it in her blood," and they ridicule "square girls" for not knowing what "putting one over" feels like. To be able to "push the edge" while high is an even greater rush, but those who cannot do so successfully because they are too "strung out" are to be avoided. Such women compromise the ability of female street hustlers to attribute their success to their own unique personal attributes. They confound the enterprise with elements of chance or gambling rather than wit or skill. What is the "edge they push," these women who often exchange sex for money and are objectified and reified as perhaps no others? It is often an edge that forces them to confront the superior power and force and assumed superior intelligence of men, or of men's monopolies, but they do so in ways that are often stereotypically feminine (just as Lyng's subjects act in stereotypically masculine ways). On the other hand, these are women who understand, on some level, that routine hustling is work, albeit work that is illicit and illegal and stands outside the formal economy. It is the work that underclass women, particularly underclass women of color and of a certain age, engage in, in a particular way at this historical moment. It is work contingent on particular class relations, but, more than anything else, it is work structured by racial/ethnic and gender oppression. (For a description of this work as a function of racial/ethnic and gender oppression, see Romenesko and Miller [1989].)

The strength of Lyng's theory, then, is that it would foreshadow just this sort of elaboration; the weakness is that he does not know it because of the fact that his microscope only has one magnitude. It is time in sociology that a range of specific magnitudes, those that have already been proved by feminists, Marxists, gerontologists, and scholars of racial/ethnic minorities to reveal much, becomes standard. It is the challenge of sociology to discover others; we have only begun, for example, to scratch the surface of that dimension of structured oppression that is heterosexism and to investigate the ways in which it structures the vision and lived experiences of those so oppressed. In the case at hand, the sort of edgework engaged in by the members of these groups should not be expected to resemble exactly the edgework described by Lyng; the structures of oppression to which it responds are unique. The resources of the members of the groups in question are usually fewer and different. However, experientially and in terms of social psychological impact, edgework might be functionally equivalent across these groups. Or, it

might be different in ways that are sociologically important and interesting. But not looking forever dooms us to not seeing.

ELEANOR M. MILLER

University of Wisconsin—Milwaukee

REFERENCES

- Miller, Eleanor M. 1986. *Street Woman*. Philadelphia: Temple University Press.
- Romenesko, Kim, and Eleanor Miller. 1989. "The Second Step in Double Jeopardy: Appropriating the Labor of Female Street Hustlers." *Crime and Delinquency* 35, no. 1 (January): 109–35.
- Statham, Anne, Eleanor Miller, and Hans Mauksch. 1987. *The Worth of Women's Work*. Albany: State University of New York Press.

EDGEWORK REVISITED: REPLY TO MILLER¹

It is gratifying to learn that one's ideas may be relevant to the work of others, even if this is revealed through criticism. In an insightful essay, Eleanor Miller suggests that my theory of voluntary risk taking may be usefully elaborated into other empirical domains, and she criticizes my failure to provide such an elaboration. I accept her claim that the contours of the argument would be different if my data set had been constituted differently. Moreover, I am confident that the model will be modified as it is applied to new evidence in the future. But one has to start someplace—my starting point was obviously not the one that Miller would have had me choose.

Many of the points expressed in Miller's critique are well-taken and identify issues that I believe deserve attention. But I think it best to respond to these points less as criticisms and more as suggestions about how to elaborate the model beyond its present empirical base. Miller makes a strong case for directing the analysis to those structures within postindustrial capitalist society that give rise not only to class oppression but also to the oppression of women and racial/ethnic minorities. She is correct in noting that the theoretical predilections of Marxists and neo-Marxists have led many of them to look past dimensions of oppression other than class. However, a central theme of her essay seems to be that the Marx-Mead framework possesses some potential for transcending this problem. Her interpretation of data on African-American, female street hustlers and similar groups suggests that the edgework

¹ I would like to thank David Franks, Diana Scully, and Gideon Sjöberg for their helpful comments on an earlier draft of this essay.

model may be useful for understanding the experience of a variety of oppressed groups. I would like to indicate how we might begin integrating these data and interpretations into the existing Marx-Mead framework.

As noted in the original article (p. 866), the key to my explanation of voluntary risk taking can be found in one of the several metatheoretical concepts that link the Marxian and Meadian systems—the dialectic between spontaneity and constraint. For both Marx and Mead, true spontaneous, creative action (which is the basis of human freedom) is only possible within the context of certain kinds of constraining structures. Each theorist defines the character of these freedom-producing structures in different ways, with Marx emphasizing the realm of human productive activity and Mead focusing on the interactional dimension. This difference is the very thing that has spurred an interest in the possibilities of a Marx-Mead synthesis. Neither framework taken alone can do justice to the true complexity of the social world, but a synthesis of the two perspectives offers a more powerful analytical model.

Thus, within the Marx-Mead synthetic framework, constrained action can be conceptualized in both economic and normative terms and can be analyzed at both macro and micro levels. Marx himself defined the structures of constraint in several different ways, as seen in his treatment of the five “primary historical relations” (Marx and Engels [1932] 1976, pp. 48–49). Although he chose to emphasize one category of constraining structures—those associated with the mode of production—he clearly understood that the general notion of constrained action can be applied to a variety of structures. Appreciating this point helps one to see how the Marx-Mead framework can be employed in the analysis of oppression associated with gender and race/ethnicity.

While I agree with Miller that the social structures of race/ethnicity and gender are analytically separate from those of class, this is true only at one level of abstraction. At a higher level of abstraction, gender, race/ethnicity, and class patterns all belong to the general category of constraining structures that constitute one pole of a common dialectic. Just as spontaneous, creative action is not possible in a social context characterized by class divisions and the separations of alienated labor, neither is such action possible in a socioeconomic structure overlaid with the divisions of institutionalized sexism and racism. When the institutional order (the realm of socially constrained action) is characterized by such divisions, many people are separated from the means by which to achieve a fully developed, individualized self. The resulting experience of oversocialization becomes a reference point for defining the ego-enhancing elements of edgework as especially valuable.

Moving from this abstract level of analysis to an explanation of the

more specific consequences of alienated labor, normative divisions, gender, race, and age discrimination, and, especially, explaining the *relationship* between these various structural patterns, is no easy task. It is this set of problems to which Miller speaks most directly, and the insights drawn from her data may be useful for resolving some of these theoretical issues. These data (and other related data) may offer important clues about how best to expand the macro-level analysis to include certain bureaucratic organizations and other institutional arrangements that play a role in denying people possibilities for the full development of the self. In my own more recent attempt to deal with edgework among the underclass (Lyng 1991), I have argued that opportunities for the use of the "survival skill" in edgework may be especially valued by members of oppressed minority groups. Although all members of modern society confront various "institutional threats" that cannot be ameliorated through the use of individual skills (i.e., nuclear war, terminal illness, general economic collapse, etc.), minority individuals confront all of these and many more such threats (e.g., the injuries associated with institutional discrimination). Hence, the experience of directly applying one's skills to the threatening circumstances of an edgework situation may hold a special allure to people of minority status. It is important, of course, to explore this problem through an analysis of the unique forms of edgework that members of the underclass, women, and other minorities typically pursue.

If Miller could acknowledge that the failure to discuss all relevant data in the early stages of theory development does not necessarily signal one's ignorance of the ways in which a theory might be elaborated, then what is the real substance of her criticism? It seems that the chief problem is deciding which features of the institutional order deserve priority in the analysis. In thinking about this problem, however, one must be cognizant of the various theoretical, methodological, and value considerations that come together when making this decision. One must decide whether to draw on existing theory or generate an entirely new framework. If an existing perspective is adopted, the empirical issues addressed will be partly determined by the basic theoretical problematic of the perspective, but they will also reflect the content of existing data or the methods employed to generate new data. For instance, the participant observation method forces one to deal with the limitations on data collection associated with the social characteristics of the participant-observer.

These considerations account, in part, for the theoretical and empirical focus of my study. The decision to treat skydiving as the principal substantive illustration of the edgework concept is a product of my rather serendipitous connection to the world of sport parachuting through part-time employment as a jump pilot. My ability to assume this position and

eventually gain access to the skydiving subculture are, no doubt, both related to my status as a white male of middle-class origins. (It is highly unlikely that with these social characteristics I could have achieved the same level of access to edgework groups made up of African-American female members of the underclass.) In accordance with the comparative method of theory development (see Diesing 1971), the case study of skydivers led me to search for additional primary and secondary data on closely related groups—other high-risk leisure groups—in order to verify and expand on the theoretical themes emerging from the original case. Thus, it is the combination of theoretically informed observation within a group to which I was coincidentally connected and the principles and contingencies of methodological strategy that helps explain the study's empirical content.

Beyond these problems, the choice of an empirical focus also involves certain value considerations. Implicit in Miller's critique is the suggestion that we should rank various forms of oppression in modern society and use this as a standard for designating "true" critical scholarship. I am particularly troubled by this suggestion. The goal of critical theory is to address *all* forms of oppression, which, by necessity, requires the collective efforts of a community of critically oriented scholars. My study of edgework is an attempt to identify a specific problem for critical analysis. The fact that some edgework groups were left out of this initial effort should not be taken to mean that I see these groups as unimportant. Rather, it reflects the theoretical and methodological limitations of a first attempt to critically analyze a difficult problem.

This brings us to Miller's other major criticism of the edgework study—that I not only neglected to incorporate evidence relating to the oppression of women and other minority groups but also ignored edgework activities typical of members of the underclass as well. This latter omission points to what Miller sees as a significant irony in my study: although the study strives to achieve the general goals of Marxist analysis it "falls short of these goals because of inattention to class" (p. 1530). Although most of Miller's essay is well reasoned and insightful, she presents us with a non sequitur at this point. By what Marxist principle do we define a study of the underclass as "class-conscious analysis" and anything that fails to focus on the underclass as *not* class-conscious? One would expect a scholar who describes herself as a Marxist feminist to approach this problem from the standpoint of the Marxian definition of class. If we conceive of class as "one's relationship to the means of production," then it is clear that my analysis deals with people who are properly defined as members of the working class—people who insure their survival by selling their labor to capitalists. However privileged these workers may be (from the perspective of underclass people), most

are still exploited by their employers and subjected to the dehumanizing forces of the productive process under capitalism. To focus on the experience of such people both inside and outside of the workplace is, in my view, to engage in class-conscious analysis.

Again, I am not suggesting that we should ignore the experience of the underclass in the study of edgework. To exclude the oppression of the underclass from our purview is unacceptable for the same reasons that we cannot ignore those forms of oppression associated with gender, sexual orientation, age, and race/ethnicity. Thus, while little evidence of edgework activities among these groups is included in the *AJS* article, I have directed significant attention to some of these groups in a recently completed essay (Lyng 1991) by making use of data from Jack Katz's (1988) study of criminal behavior within the underclass. I am particularly intrigued by the similarity between Katz's data on a variety of criminal behaviors among underclass males and the data collected by Miller in her study of female street hustlers. These common patterns suggest that the edgework concept may allow us to classify a broad range of human activities that have not been previously linked in a theoretically useful way.

A final issue deserves some comment.² Although I have focused on the content of Miller's critique in this essay, I would also like to address a general problem within the discipline that may lurk behind many of her criticisms. If one defines the purpose of my effort in terms of the research strategy that has guided much of the past work in sociology, one might easily find a gender/class/ethnic bias in this study. It is unfortunately true in sociology (and other disciplines as well) that many theoretical treatments of the discipline's central problems are plagued by a systematically produced pattern of distortion. Social theorists (traditionally white middle-class males) often develop theoretical frameworks on the basis of data that either involve white middle-class male subjects or focus on activities and problems directly related to this segment of the population. Once elaborated, the frameworks are applied to other evidence in a way that accords with a central assumption of positivist science, the principle that valid theory is universally applicable. If the fit between the theory and data relating to various "outgroups" (defined in terms of gender, class, race/ethnicity) is problematic, this does *not* typically lead to a modification of the theory. Rather, the theorist often leaves the original formulation intact while implicitly imputing a deviant status to groups whose behavior cannot be adequately explained in terms of the existing framework. The appending of ad hoc propositions about the experience

² This issue was brought to my attention in personal communication with Diana Scully

of women, the underclass, and nonwhites to theoretical models designed to account for the experience of white middle-class males is often the result of such efforts.

Perhaps this concern is at the root of Miller's criticisms. This is certainly suggested by her response to my "ad hoc" explanation of the predominance of males and young people in the leisure sports I examined. I should stress, however, that these propositions refer only to the empirical pattern in question (the predominance of young males in these sports), which is a pattern so striking as to demand some explanation. It should not be assumed in this or any other part of my study that the edgework model in its present formulation is intended as an explanation of voluntary risk-taking activities typical of women, the underclass, and people of color. Admittedly, I may have implied such an intention by claiming to have generated a truly "comprehensive" theory. However, a comprehensive theory of edgework clearly requires a much broader empirical base than the one I offer in this article.

In conclusion, I reiterate that the elaboration of any theoretical model must be accomplished in a piecemeal fashion; one cannot explain it all in a single outing. Miller appears to find the edgework concept helpful for understanding some of her own data. Consequently, I encourage her to further explore this avenue of research. In order to truly avoid the doom of not seeing all there is to see, we must commit ourselves to looking for answers as part of an ongoing, collective effort.

STEPHEN LYNG

Virginia Commonwealth University

REFERENCES

- Diesing, Paul. 1971. *Patterns of Discovery in the Social Sciences*. Chicago: Aldine-Atherton.
- Katz, Jack. 1988. *Seductions of Crime: Moral and Sensual Attractions in Doing Evil*. New York: Basic.
- Lyng, Stephen. 1991. "Criminal Behavior as Edgework." In *Current Issues and New Directions in Risk Taking: Research and Intervention*, edited by R. W. Bell. Lubbock: Texas Tech University Press. In press.
- Marx, K., and F. Engels. (1932) 1976. *The German Ideology*. Moscow: Progress.

COMMENT ON SIEGELMAN'S REVIEW OF AUCTIONS

Despite the many positive things that Peter Siegelman has to say about my book, *Auctions: The Social Construction of Value* (New York: Free Press, 1989), I feel compelled to cite a factual error. I refer to his claim that I fail "to mention the most important insight of the economic theory

of auctions—William Vickrey's 'revenue equivalence theorem' " (*AJS* 95 [January 1990]: 1109–11, quote at 1110). Not only is Vickrey listed in the index of my book but his seminal article is included in the bibliography and noted twice in the text (see pp. 200, 207). Furthermore, Vickrey's paradigmatic example for generating a more Pareto-optimal equivalency—the second-price method in sealed bid auctions—is discussed in some detail (see pp. 71–72). (It should be noted, however, that both theoretical and laboratory experimental results bearing on what Siegelman refers to as Vickrey's "revenue equivalence theorem"—more commonly referred to as the Vickrey-Harris-Raviv Theory of Nash Bidding Behavior—are considerably more complex than he indicates.)

Siegelman's oversight, while disturbing, is much less troubling than the fact that he fails to allow that it would not matter one iota if I ignored Vickrey completely. As clearly stated in the preface, it is not my intention to feature or elaborate the economic auction paradigm, since the economic auction paradigm does not explain real-world auctions constituted by real people, which are the subject of my book. The Nash equilibrium model that Vickrey employs for "simple auctions," for example, requires, to quote Vickrey, that we ignore "such elements as collusion among bidders, side payments, communication, or signaling,"¹ conditions that commonly characterize real auctions. It is specifically on account of such limiting conditions and other counterfactual assumptions that I reject the economic model. Siegelman is, consequently, correct in recommending that persons interested in learning what economics has contributed to our understanding of auctions turn elsewhere. He is incorrect, I fear, in believing that economics has much to offer sociologists interested in understanding real auctions.

CHARLES W. SMITH

Queens College, CUNY

¹ William Vickrey, "Counterspeculation, Auctions, and Competitive Sealed Tenders," *Journal of Finance* 16 (1961):8–37, quote at 15.

REPLY TO SMITH

Charles Smith is of course correct—he did mention the article by William Vickrey, and I apologize for my oversight. Let me suggest again, however, that sociologists interested in understanding real auctions can indeed learn something from economics. The pioneering article of Vickrey's that Smith quotes in his reply was written in 1961: in the intervening three decades, much of the theoretical and empirical work on auctions has been directed at relaxing the obviously artificial and stylized assump-

tions Vickrey employed and examining the data on the behavior of real-world auctions to see how well they conform to the theory.

As one example, consider the problem of the Winner's Curse. The winning bidder in a common-value auction will tend to be the one who has made the largest positive error in estimating the true value of the object being auctioned: thus the winner will be likely to earn negative profits from her bid. A series of actual, real-world auctions (those of offshore oil drilling rights by the federal government) apparently displayed this phenomenon during the 1960s.

Economic theories of auctions cannot explain why an auctioneer uses a singsong chant or why bidders at a horse auction dress differently from those at the New England fish market. But surely there is more to auctions than this. For a sample of the important problems that economic theories *can* illuminate, I urge readers to take a look at the sources cited in my original review. Naturally, any sociologist interested only in dismissing economics is free to stick with Smith instead.

PETER SIEGELMAN

American Bar Foundation

Book Reviews

The Impossible Science: An Institutional Analysis of American Sociology.
By Stephen Park Turner and Jonathan H. Turner. Newbury Park, Calif.:
Sage, 1990. Pp. 222. \$36.00 (cloth); \$17.95 (paper).

Charles Camic

University of Wisconsin—Madison

The Impossible Science is a collaborative work by two scholars with differing views on the perennial question of whether sociology can be a "science." As they summarize their differences: "J. H. Turner [believes] that it is, in principle, possible to produce sociological knowledge like that in the natural sciences, and S. P. Turner [holds] that the cognitive success of sociology should be interpreted differently." Despite their differences here, the two authors agree that sociology is now "the impossible science" for the reason that the "the organization of [the discipline] as a whole hinders its development as a science" (p. 8). How this inhibitive form of organization emerged and became institutionalized in this country during the past hundred years is the subject of Turner and Turner's valuable monograph.

The distinctive contribution of the study is its analysis of the history of American sociology from the point of view of the field's changing "resource base." Arguing that "the structure of sociology as an academic discipline and the production of ideas is intimately connected to the nature and level of resources that have been available to sociologists" (p. 8), Turner and Turner examine the impact of various material, organizational, and symbolic resources during four periods in the discipline's development: the pre-World War I period, which witnessed the tentative academic establishment of sociology; the interwar period, during which the field slowly "penetrated the curriculum of colleges and universities, but [without] standardization of theory and method" (p. 74); the postwar period (up to 1960), characterized by a new and "dramatic attempt to integrate theory and research" (p. 188); and "the golden era" of the 1960s and early 1970s, when the discipline underwent tremendous expansion, along with greater diversification and fragmentation. The authors' focus on resources proves an effective way of unifying this wide-ranging historical account; and while some of the ground covered (concerning, e.g., the significance of "reformist resources" in the early period and of government funding in 1960s) is already well known, the detailed analysis of the complex role of foundation support in the interwar and postwar period is fresh and richly informative. The resource perspective also

Permission to reprint a book review printed in this section may be obtained only from the author.

works well when the authors turn from the past to the present and reflect on the "profound integrative problems" that they regard as the heavy legacy of the history of American sociology (p. 178).

Another strong feature of the book is its treatment of the history of empirical social research. Unlike many histories of sociology, which limit attention to the ideas of prominent theorists from different periods, *The Impossible Science* very usefully traces the development of sociological research from the early social surveys of local communities, through the methodological disputes and statistical innovations of the 1930s, and down to the widespread adoption, after World War II, of "the survey paradigm," which is based on advances in sampling theory and the practice of significance testing. The book does track the history of theory as well, though this aspect of the analysis is somewhat weaker and encumbered by certain common problems—among them a tendency to (1) lose some of the thinkers considered in a sea of underdefined isms (individualism/mentalism, organicism), (2) project present-day preoccupations (e.g., the macro-micro debate) onto those from the past, and (3) fall back into the textbook view that "Parsonian functionalism" dominated the post-World War II period (a point rather undercut by the book's account of some of the empirical research at the time; see, e.g., pp. 18, 21, 169). Despite this, Turner and Turner deserve praise for producing a history of sociology that not only examines how empirical research and theory both developed, but also investigates the dynamic interplay of the two.

This said, however, brief note may be made of two areas in which I think their book might have been improved. First, it would have been useful if the historical analysis were longer and more systematic. Throughout the study, a number of important characters and events appear without being sufficiently introduced; readers unfamiliar with the story may find confusing some of the quick flash-forwards and flash-backs. The same may be said of the way in which the analysis slides back and forth between the histories of (a shifting set of) individual departments and developments in American sociology at large. There is also a tendency to subject the same data to different interpretations at different points, as when Turner and Turner describe the 1930s in one place as a time when "the academic job market [in sociology] was collapsing . . . and few positions were available" while elsewhere stating that "the demand for Ph.D.-holding [sociologists was among] the growth sectors of the 1930s" (pp. 85, 62). In addition, more attention might well have been given to the content of sociological writings in the various periods, and much more documentation should certainly have been provided. In many cases, the book makes mention of significant historical facts that are unknown even to specialists and that the authors presumably discovered through new archival research, but it brings these facts forth with no indication of the primary or secondary sources that establish them.

The second way in which the book might have been strengthened is by a fuller treatment of the intellectual and institutional relationship

between sociology and other academic fields, both within and without the social sciences. While breaking a considerable amount of new ground, Turner and Turner still adhere to the long-standing practice of recounting the history of sociology by staying within the sociological fold. Yet, throughout the period covered by their study, sociology's relationship to other fields was of great importance. This was particularly so where resource issues were involved, for the resource-building strategies that sociology utilized were generally modeled after those used in some of the more established fields, and it was these same fields—and a long succession of newcomers—that constituted the ever-present competition in sociology's scramble for desired resources. Turner and Turner would not, I think, contest this; other disciplines do make appearances in the book, albeit in fleeting roles rather than in the leading ones they actually played. To wish that this had been taken into account, however, is another way of saying that *The Impossible Science* is a stimulating history that offers much on which to build.

Social Entropy Theory. By Kenneth D. Bailey. Albany: State University of New York Press, 1990. Pp. xviii + 310. \$54.40.

Thomas F. Mayer
University of Colorado

The elusive concept of entropy was first formulated by the 19th-century German physicist Rudolf Clausius. In its original meaning, entropy referred to energy present in a thermodynamic system but not available to perform work. Gradually the concept of entropy became separated from the study of heat and came to function as a generic measure of the disorder present in any system whatsoever. With the emergence of information theory, entropy acquired another related meaning. It signified the uncertainty present in knowledge or communication.

Clausius used the entropy concept to develop what has become known as the second law of thermodynamics. According to this principle, the entropy of any physical system tends to increase. It follows that the only stable condition is one of maximum entropy, sometimes interpreted to mean total randomness. The second law of thermodynamics poses extremely serious problems for social theory. If this law is correct, how can we explain systems of social interaction in which entropy appears to decrease rather than increase? And what implications does the second law have for the notion of social equilibrium? Is the only true social equilibrium a condition of total randomness tantamount to the disintegration of society?

One body of thought that explicitly addresses the implications of the entropy law is general systems theory. This perspective deals with the problems mentioned above by elaborating the distinction between closed and open systems. A closed or isolated system does not exchange energy

or information with its environment and is therefore subject to rising entropy. An open system, because it allows inputs of energy and/or information from external sources, need not experience entropy increases.

In *Social Entropy Theory*, Kenneth Bailey tries to integrate the dispersed thinking about the social implications of entropy into a coherent theory of society as a whole. His approach is based on a synthesis of functionalism and general systems theory, and he makes extensive use of James Miller's distinction between conceptual systems and concrete systems (composed of nonrandom accumulations of matter and energy). Human society, Bailey argues, must be understood as a concrete system located in physical space, and a suitable model must faithfully represent the interactions between concrete social actors (rather than between abstract social roles).

Epistemology is a central component of Bailey's social entropy theory. The conventional epistemology of science assumes two levels of reality, conceptual and empirical, and charges science with the task of establishing an isomorphism between these two levels. But in social affairs it is not always possible to establish a direct isomorphism between the conceptual and empirical levels. To deal with this and related difficulties, Bailey identifies a third level of sociological reality, which he calls the indicator or operational level. This third level refers to concrete measurements or descriptions of the real world.

Confronted with three levels of social reality, the sociologist must consider isomorphisms of three kinds. In addition to the usual isomorphism between the conceptual and empirical levels (what Bailey calls path *a*), consideration must be also given to the relationship between the conceptual and the indicator levels (path *b*) and the relationship between the empirical and the indicator levels (path *c*). By establishing suitable path *b* and *c* isomorphisms, the sociologist can compensate for the inaccessibility of the path *a* isomorphism. Bailey uses this three-part model in virtually every part of his social entropy theory.

The boundaries of social systems are socially constructed and correspond to entropy breaks or discontinuities; that is, the level of entropy differs from one side of the boundary to the other. Typically the boundary of a social system enables the importation of energy and information to combat internal tendencies toward increasing entropy.

According to Bailey, all social systems have six global variables: population size, information, space, technology, organization, and level of living (acronym PISTOL). Moreover, all societies distribute the other five global variables among their populations, thus creating what Bailey calls the five mutable distributions. He considers these mutable distributions to be the main analytical properties of the social order and the foundation of macrosociology. A person's location within the five mutable distributions goes a long way toward defining her overall position in society, and thus these five variables constitute a crucial linkage between the macro and micro levels of social analysis.

A brief review cannot discuss all the variations of social entropy theory

developed by Bailey. I admire Bailey's capacity to integrate a wide range of theoretical concepts and his ability to work with highly abstract ideas. Nevertheless I find the unrelenting abstractness of *Social Entropy Theory* quite frustrating. Never is the theory applied to real sociological data or anything like a real social situation. The author seems to think that lack of empirical application facilitates theoretical generality. This is not my impression at all. The unrelenting abstractness merely obscures the substantive meaning and impugns the empirical relevance of social entropy theory. Despite the exciting possibilities latent within the underlying concepts, not many people will understand the social world better from reading *Social Entropy Theory*.

Nuts and Bolts for the Social Sciences. By Jon Elster. Cambridge: Cambridge University Press, 1989. Pp. viii + 184. \$34.50 (cloth); \$9.95 (paper).

Mark Gould
Haverford College

Jon Elster has attempted, in *Nuts and Bolts for the Social Sciences* and its more complex companion volume, *The Cement of Society: A Study of Social Order*, to (re)invent sociology. He argues that the social sciences must focus on mechanisms instead of laws. Working from within a rational-choice perspective he seeks to justify the inclusion of noninstrumental norms, in addition to rational choice, as a crucial mechanism required to explain social order. He delineates his argument by discussing a number of social activities that he feels are explicable by these mechanisms, including social institutions, bargaining, and collective action.

Nuts and Bolts for the Social Sciences is intended as an introduction to and an illustration of the applicability of rational choice and noninstrumental norms as mechanisms of explanation. As such it requires evaluation along two dimensions. Are the tools it provides satisfactory for the task? Is Elster's explication of these tools accessible to the reader, such as an undergraduate student, who may be encountering them for the first time?

According to Elster, social norms are not explicable in terms of individual, rational adaptation to social situations, or individual maximization under constraints. Norms are irreducible to rational choice. While I agree with this contention, in my opinion Elster fails to understand, or at least to specify, when norms must be introduced into a rational-choice theory, and, more important, he fails to understand the consequences of their introduction for such a theory.

In orthodox Arrow-Debreu general equilibrium models there is no need to postulate norms as a mechanism constituting social order. In these

models, each agent maximizes exogenously defined goals under the assumption of perfect information. For example, workers receive the value of their marginal product as a wage, and this value is known to both employee and employer. If the workers shirk, the value of their marginal product diminishes and so does their wage (see pp. 59–60). Economically homogeneous workers receive equivalent wages, the value of equivalent marginal products. In equilibrium, a Pareto optimum is manifest. No agent can be made better off without some agent being made worse off. If actors accept their original positions, their endowments of personal attributes and alienable property, none has a motive for altering the equilibrium outcome. In perfect-information neoclassical (rational-choice) models there is no problem of order; power is absent from these models and there is no need to conceptualize social norms, in fact one cannot meaningfully do so.

In more contemporary microeconomic models, imperfect information is the reigning assumption. Here, where workers' marginal products are not costlessly known, there is a problem of control. In these circumstances employees may act opportunistically and employers must motivate workers to work hard. Situational sanctions like efficiency wages and the threat of firing are vehicles that enable employers to control their employees. In imperfect-information models, however, it becomes both possible and necessary to conceptualize normative controls. Workers will work harder at less monitoring cost to their employers when they view their work situation as legitimized by moral values and when the orders given to them are seen to be procedurally justified. With regard to imperfect-information models, Elster is correct that the mechanism of rational choice (maximization in terms of situational sanctions) must be supplemented by social norms.

What Elster fails to realize is that *within* a rational-choice theory, such norms must either be reduced to the situational sanctions that support them, in which case they are no longer conceptualized as social norms, or they must be reduced to the preferences actors set for themselves. In the first instance it is the sanction that inhibits or motivates activity. In contrast, as Elster puts it, internalized norms must motivate action even without fear of punishment (p. 14, n. 3) or anticipation of reward. In the latter instance, where norms constitute intrinsic incentives for acting in a certain way, preferences will not be well behaved (p. 23, n. 4).

Elster gives a wonderful example of the problem of poorly ordered preferences: "Suppose a house-owner is willing to pay his neighbor's son ten dollars to mow his lawn, but not more. . . . Imagine now that the same person is offered twenty dollars to mow the lawn of another neighbor. It is easy to imagine that he would refuse, probably with some indignation. But this has the appearance of irrationality. By turning down the offer of having his neighbor's son mow his lawn for eleven dollars, he implies that half an hour of his time is worth at most eleven dollars. By turning down the offer to mow the other neighbor's lawn for

twenty dollars, he implies that it is worth at least twenty dollars. But it cannot both be worth less than eleven and be worth more than twenty dollars" (p. 115). In this situation, preferences are not transitively ordered and the theoretical apparatus of neoclassical theory crumbles, as its arguments become indeterminate. One cannot explain actions by desires and opportunities when the desires are inconsistently ordered (see p. 14).

Ill-ordered preferences are routine in situations where social norms are conceptualized as regulating the selection of both ends and means; what is desirable and obligatory often conflicts with what is desired. An alternative theory capable of, at least in principle, determinately conceptualizing both rational adaptations to situational constraints and normatively regulated selections of means and ends cannot be atomistic (reducing all theoretical propositions to statements about individual unit acts), (implicitly) positivistic (treating instrumental rationality as the sole positively stated normative orientation), and empiricist (banning constructs and reducing all concepts to directly observable phenomena); nor can it maintain the independence and exogenism of ends.

Elster's theory remains within the narrow, methodologically individualistic, rational-choice perspective because the norms he discusses ultimately reduce to preferences, motivations, or tastes for individual action. For Elster, social norms are simply internalized preferences shared among a group of individually conceptualized actors. The consequence of the introduction of social norms into his arguments is that the arguments become arbitrary and ad hoc. He recognizes that "just-so stories" do not constitute adequate explanations for social action (p. 8), but he does not seem to realize that his book is filled with (sometimes wonderfully clever) just-so stories. This consequence is necessarily the case as his rational-choice theory is, like all rational-choice theories, tautologous when desires are indeterminate (see pp. 31 ff.). The only way to avoid this problem of revealed preference, a problem exacerbated by the introduction of social norms into a methodologically individualistic framework, is the sociological reconstruction of economic theory, introducing socially structured mechanisms (including social norms) both to order preferences in a determinate fashion and to serve as vehicles of explanation. The attempt to economically reconstruct sociology is futile.

Nuts and Bolts consists largely of illustrations using rational-choice theory in discussions of equilibriums, collective action, bargaining, and so on. It does not, however, provide a systematic and consistent box of theoretical tools that students might assimilate and then utilize in their own work. Like all of Elster's books, *Nuts and Bolts* is worth reading, if only to see the ingenuity with which Elster constructs arguments. Perhaps because it is intended as a primer, its failings are more apparent than was the case in his earlier books. The clarity of his failure may be Elster's gift to the social sciences, an unintended demonstration of the necessity of social structural explanations of social action.

Science as Power: Discourse and Ideology in Modern Society. By Stanley Aronowitz. Minneapolis: University of Minnesota Press, 1988. Pp. xii + 384.

Chandra Mukerji
University of California, San Diego

In Stanley Aronowitz's new book, he reviews and rethinks Marxist theories of the historical role of science and technology in Western societies. The book may well please Marxist theorists who are uncomfortable with Marx's optimistic view of science and technology yet still unhappy with the critiques of science that have followed it. However, this book will probably not be of use to the majority of sociologists of science. The author seems to have been swept away with the intricacies of Marxist philosophical debates, losing touch with the other rich literatures on science that have developed over the past few decades.

What Aronowitz does in this book is review the range of Marxist interpretations of science and technology, trying to tease out the sources of the powers of science. He addresses Marx's treatment of science and technology as outside of ideology (as a positive historical force untainted by economic relations); Engel's view that dialectics could be found equally in the social and natural worlds (suggesting that a distinctively Marxist science could develop); Lukács's denial of this view (and the opening up of the possibility of a critique of science); critical theory's link between domination of nature and human domination (taking scientific exploitation of nature as a counterpart of social exploitation); Althusser's attempt to articulate a scientific Marxism (making science a model for Marxist thought rather than an object of it); and Gramsci's links between science and hegemonic domination. Along the way, he describes different ways in which science and technology have functioned in shaping different historical moments. He talks about the centrality of science as a way of knowing, as a productive force, and as a source of legitimation. He also turns to the role of science and technology in the labor process, particularly during the second industrial revolution. He traces the significance and growth of scientific Marxism, and he looks at the development of the behavioral and social sciences.

In reviewing these ideas, Aronowitz makes clear the difficulty of defining a distinctively Marxist approach to science and technology. He points out continuities between Marxist and non-Marxist philosophies and sociologies of science that are more visible than the links between Marxist perspectives. The effort is Herculean in scale and Sisyphean in result. To cover all this ground, Aronowitz necessarily moves too far too fast—from history, to sociology, to philosophy, and back again. He jumps from theorist to theorist in the same vibrantly active fashion with which he speaks, showering the reader with the product of his massive reading, but the final analysis has many vices as well as virtues. The way he

reads to satisfy his curiosity about Marxism and science leads him to underdifferentiate non-Marxist literature, and hence he may leave the unknowing reader with the sense that, having read Aronowitz and having studied the Marxist tradition, there is little to be gained from a deep acquaintance with other literature.

Take, for example, the treatment of Bruno Latour's work in the latter part of the book. Aronowitz appropriately finds Latour's theory among the most political of positions held by the ethnographers of scientific practice. Having correctly noticed Latour's view that scientific "discoveries" are fundamentally political, he compares Latour's work to that of Alvin Gouldner. He does not explain or even find important the distinctive antistructuralism in Latour's work and its diametrical opposition to much of Gouldner's understanding of society and politics.

Aronowitz also (surprisingly) does not include issues from feminist epistemology in his attempts to shape a new study of science. Feminist epistemology has become the most lively Left critique of science. Aronowitz acknowledges its existence and political importance, but he does not seriously consider its tenets. He simply points to this line of analysis in the beginning of the book, and then proceeds to ignore it when formulating his new take on science and technology.

Perhaps the most disappointing part of the book is this lack of real engagement with other traditions of research and analysis. When he proposes a "new social theory of science," he does not solve problems raised by contemporary scholars. What he ends up saying is that science cannot be treated as separate from ideology, that it is linked to systems of power through money and technology, that the objects of science and the experimental method are both ideologically defined, and that science is no longer the province of individuals. The last idea fits with attempts to trace patterns of distributive cognition among scientists or members of laboratories, and the propositions about power are not unrelated to feminist critiques, but there is no effort to trace out the conceptional implications of these lines of convergence. Aronowitz has not provided the book needed by the colleagues I know in science studies and the students who come to me to understand this field. These readers want a good book for trying to understand contemporary sociology of science, its limits, and its possibilities for change.

There is an opportunity lost here. There are many of us who have been searching for some way to think more cogently about institutions of science and the power of science beyond the limits of Mertonian sociology of science and of contemporary laboratory studies. Stanley Aronowitz should have been a help, but he wrote a good book on science for a different audience.

Social Control and Multiple Discovery in Science: The Opiate Receptor Case. By Susan E. Cozzens. Albany: State University of New York Press, 1989. Pp. xiii + 236. \$44.50 (cloth); \$14.95 (paper).

Lowell L. Hargens

University of Illinois at Urbana-Champaign

Scholars long have argued that science and technology have a nontrivial propensity to produce multiple discoveries—those independently made by two or more researchers at roughly the same time. The traditional interpretation of this phenomenon holds that researchers in these fields tend to focus on similar problems using similar techniques and that their work is consequently channeled along converging lines. This interpretation has led many to conclude that science and technology are essentially collective enterprises and that the direction and perhaps even the rate of progress in such fields may be little affected by individual researchers' abilities and efforts. In several influential papers published in the early 1960s, Robert Merton argued that multiple discoveries are pervasive in science and that examining the behavior of scientists during the resulting priority disputes yields crucial information about the institutional structure of science.

In recent years these arguments, traditionally popular among sociologists and anthropologists, have come under attack from those who hold that close analysis usually reveals that the individual contributions included in an alleged multiple discovery are so heterogeneous that the term "multiple discovery" is a misnomer. In addition to questioning the validity of the overall conclusions of previous work, such attacks have led to debates about the criteria that an operational definition of multiple discoveries should meet. In *Social Control and Multiple Discovery in Science*, Susan Cozzens presents a case study of a recent multiple discovery in biomedicine. Instead of investigating the social and intellectual forces that led the researchers to make the "same" discovery or seeking to determine whether the various efforts included in the multiple discovery were truly equivalent, however, Cozzens focuses on the processes that prompted biomedical researchers to define a set of research results as a multiple discovery.

Cozzens studied work now generally considered to be the discovery of the opiate receptor (a molecule on the surface of nerve cells that enables opiates to have their physiological effects). Four laboratories claimed credit for the discovery, and Cozzens sought to determine how each of the potential codiscoverers made their claims and how other researchers assessed them. To do this, she (1) conducted in-depth interviews with the heads of the four laboratories and approximately 20 biomedical researchers who were aware of and interested in the discovery ("third parties") and (2) collected data on how the potential codiscoverers and the third parties cited the discovery in their publications.

Cozzens notes that researchers engaged in priority disputes can appeal to many criteria in attempting to gain credit for a discovery or to keep others from gaining such credit. In addition to the standard considerations of timing (Whose paper was accepted or published first?) and independence ("After he heard our paper at the conference, X replicated our work using a different chemical"), they may argue that competitors did not really understand the actual implications of the discovery or that the results competitors reported in their papers were not sufficiently convincing to be counted as constituting the discovery. Indeed, researchers may put forward different versions of just what a discovery "really" was in attempting to convince others that the researchers deserve credit for it. Cozzens reconstructs the various parties' claims of priority in the opiate receptor case and finds that the different laboratories stressed criteria that emphasized the uniqueness and importance of their own contributions. Her analysis of the four laboratories' citations to each other in papers published after the discovery indicates that it took about 18 months to establish a general agreement that the opiate receptor work constituted a multiple discovery, although they never completely agreed on which laboratories made the discovery.

Cozzens's interviews with some of the third parties to the dispute revealed that they learned about the disagreements among the discovery claimants through informal channels and tended to take a "hands-off" stance toward the dispute. Third parties expressed their opinions about who deserved credit in the way they referenced the discovery in their own papers but apparently did not attempt to ascertain the exact facts of the case or try to persuade the disputants to change their opinions or behavior. Cozzens argues that such third-party responses serve to reduce animosity among discovery claimants and to keep priority disputes from public scrutiny. Her analysis of how third parties referred to the discovery in their own papers indicates that they came to a consensus on the questions of whether there was a multiple discovery and what laboratories deserved credit sooner than the claimants.

Cozzens casts her study of the opiate receptor case as an analysis of social control in science. Specifically, she asks whether the moral responses of the priority claimants and third parties can be better understood by viewing them as flowing from "sociological ambivalence" or "self interest." In general, Cozzens finds that the former concept is most appropriate in the opiate receptor case, but her final chapter calls for the development of a synthetic view that incorporates and moves beyond these two alternatives.

This is an interesting and thorough analysis of the social processes by which scientists come to define a set of research accomplishments as a multiple discovery. Although some may disagree with Cozzens's theoretical approach and conclusions, her study sets high standards for future research on the multiple-discovery phenomenon.

Structural Equations with Latent Variables. By Kenneth A. Bollen. New York: Wiley, 1989. Pp. xiv + 514.

Ross L. Matsueda

University of Wisconsin—Madison

Kenneth Bollen's new book, *Structural Equations with Latent Variables*, is a "comprehensive introduction" to the LISREL approach to covariance structure analysis. It is clearly written, insightful, and complete. In it, Bollen covers both basic and advanced topics, provides his own useful insights into controversies and recent developments, and makes good use of empirical examples to illustrate important points. He also stresses, at every point, that substantive knowledge and theory of the process being modeled are indispensable for using the method fruitfully.

The book opens with two chapters of preliminary material: (1) the fundamental assumption that a set of population moments are generated by a system of linear equations; (2) the Jöreskog-Keesling-Wiley model in matrix form; and (3) algebraic rules for covariances and path analysis. Chapter 3 presents a simple working definition of causality: a causal relationship between independent and dependent variables exists when there is isolation (or "pseudoisolation"), association, and causal priority. This definition allows Bollen to link his discussion to the treatment of omitted-variable bias in econometrics but does not allow him to address the recent debate over causality raging in the social sciences. Also in this chapter, Bollen briefly assesses the strengths and weaknesses of causal modeling.

Perhaps the major strength of covariance structure analysis is that it incorporates models of measurement error into structural models. In chapter 5, Bollen shows analytically why estimates of regression coefficients are biased and inconsistent when independent variables are measured with random error but unbiased when dependent variables are measured with error. An important omission here, however, concerns the consequences of random errors of measurement for the efficiency of estimates (covariance structure analysis has been preoccupied with asymptotic efficiency within the class of consistent estimators). In chapter 6, Bollen critically reviews classical test theory, showing that validity coefficients often confound invalidity of the measure with invalidity of the criterion or construct and that most classical measures of reliability require assumptions (such as parallel or τ -equivalent tests) that are typically untenable. He then argues persuasively for using alternative measures of validity and reliability based on parameter estimates of an explicit and less restrictive measurement model.

The remaining chapters discuss specification, identification, estimation, and testing for three general classes of models: linear models in observables, confirmatory factor models, and the general LISREL model. In each chapter, Bollen also introduces specialized and advanced topics,

which escalate in difficulty, culminating in the final chapter on extensions of the general model. For example, in chapter 4, which covers structural models in observed variables, Bollen gives a clear and intuitive treatment of estimation including the logic of maximum-likelihood estimation and other fit functions leading to GLS and ULS estimators. The treatment is from the standpoint of covariance structure analysis; econometric topics such as heteroscedasticity and autocorrelation are left to introductory econometric texts.

In chapter 7, which covers confirmatory factor analysis, Bollen gives a fine discussion of likelihood ratio, Wald, and LaGrangian multiplier tests of nested models. He also discusses the problem of overall goodness of fit and takes us behind the scenes of ad hoc indices of fit (a penetrating discussion, although many will yearn for a more critical treatment). In chapter 8, which covers the general LISREL model, Bollen provides an excellent discussion of statistical power, which presents the problem of type-2 error and shows how to compute the power of tests in covariance structure models. This chapter also covers additional topics, including estimating and testing models for multiple groups (some of the discussion of modeling intercepts is somewhat dated with the release of LISREL 7), estimating models with values missing at random (including the maximum-likelihood [ML] estimator using LISREL's multiple-group option), and computing total, direct, and indirect effects.

Chapter 9 covers several extensions to the general model. After discussing inequality constraints and product variables among latent constructs, Bollen gives an excellent discussion of the consequences of violating the assumption of multinormality. He presents the properties of GLS and ML estimators under elliptical and arbitrary distributions; discusses measures and tests for skewness and kurtosis; and, finally, presents the asymptotically, distribution-free, estimator (weighted least squares), its properties, and its strengths and weaknesses in practice. Bollen's coverage of categorical observed variables is also good, although not as comprehensive. He discusses the consequences of violating the assumption of interval scales, reviews studies of the robustness of GLS and ML estimators, and then briefly covers corrections for ordinal data. The latter includes computing polychoric, tetrachoric, or polyserial correlations and then using weighted least squares to obtain optimal estimates and correct standard errors. Here Bollen simply gives basic results (referring the reader to the work of Muthen and others for details) and does not present the full details of Muthen's general measurement model for analyzing limited and discrete variables.

Overall, this book lives up to its claim to be a "comprehensive introduction" to covariance structure analysis. The fine use of empirical examples throughout, combined with the clarity and rigor of the presentation, makes the book appropriate for two distinct audiences. First, beginning students and competent users who want to learn the methods (but are uninterested in recent advances and debates) will benefit from Bollen's empirical examples and practical recommendations. Second,

more advanced users, who are concerned with recent developments in the literature, will benefit from Bollen's lucid treatment of advanced topics. A third audience—experts who contribute to statistical methods of structural modeling and who seek an advanced treatment—will find this book less useful, since it does not present derivations based on asymptotic distribution theory (a brief appendix presents only basic principles of asymptotic theory), Bayesian methods of estimation, and other advanced statistical issues. For all other users, however, this book will be a welcome addition, an excellent introduction, and an invaluable reference.

The Three Worlds of Welfare Capitalism. By Gosta Esping-Andersen. Princeton, N.J.: Princeton University Press, 1990. Pp. xi + 248. \$37.50 (cloth); \$12.95 (paper).

Claus Offe

University of Bremen

This book is yet another fine piece in a series of macroquantitative studies on the welfare state that have appeared since the mid-eighties. It combines a wealth of data with qualitative historical sociology and an explicit discussion of the normative foundations of types of social welfare policies.

The author's key argument is organized around the concept of "decommodification," which is used to designate the function of social rights in a capitalist society to make employees' "living standards independent of pure market forces" (p. 3). The extent to which—and the way in which—contemporary welfare states accomplish such emancipation is the yardstick by which regimes are typologized and evaluated. If we look at Organization for Economic Cooperation and Development countries in a longitudinal as well as a cross-sectional perspective, these regimes cluster neatly, or so the author claims, into three types, which he labels conservative, liberal, and social democratic. Given the weight that is to be carried by the deceptively simple decommodification concept and its opposition of "citizenship versus performance," it would have benefited from a more rigorous conceptual analysis. Does it have a shared meaning for actors in all three regimes? If it applies to the labor contract (e.g., in the form of seniority rules and social security rights), could it also alternatively apply to the goods and services labor consumes (e.g., housing and education rights or subsidized food)? How does it relate to the status-versus-contract or the equity-versus-efficiency distinctions? And could it be that, instead of decommodification's being the *opposite* of the treatment of labor power as a commodity, it is in part also a *precondition* of such treatment and its social viability?

Another important argument of the book is that the welfare state must not only be analyzed as the outcome of historical forces but also as an agency of social stratification and "an active force in ordering social

relations" (p. 23). There is the recurrent suggestion of a virtuous feedback loop; social forces shape regimes that in turn shape social forces in ways that contribute to the consolidation and enforcement of the very same regimes.

I find the suggestion of internal consistency and historical durability of regime types original and provocative but unconvincing in the last analysis. Take the institutional characteristics of the "conservative" regime type, which is said to consist of the ideological and institutional components of feudalism, clientelism, paternalism, statism, and corporatism. The obvious problem with such a multitude of institutional characteristics is that they (a) hardly ever coincide in any single case and (b) are nonexclusive, that is, partly shared by other regime types. To say the least, regime types come in many local variants, and they tend to be "impure." Empirical cases within these types also change over time, merge into each other, and engage in processes of mutual imitation.

Esping-Andersen seems to lean toward a strongly "rationalistic" theory of political and institutional development. In the beginning there were elites in power, together with their allies, constituencies, and specific ideological projects; at the end of some chain of intentional historical causation, there are institutional practices in place that reflect the largely undiminished heritage of the founding elites. No unanticipated consequences of action, no emergent possibilities and conflicts, and no adaptive pressures intervene in the process, the outcomes of which are held to be largely a matter of political will.

"Crystallization" is the author's favored metaphor to emphasize the self-contained, distinctive, and "frozen" nature of his three welfare state "worlds." While this claim may be at times simplified for the sake of didactic considerations and hard to defend on empirical and even conceptual grounds and while the author thus does not always avoid the risk of confusing "ideal" and "real" types, the next step of his analysis works admirably well. It consists in working through the "institutionalist" agenda of systematically linking social structures, conflicts, and belief systems as dependent variables to the institutional practices that define his three "worlds."

In the second part of his book, the author demonstrates what institutionally different welfare states do to their citizens and how they shape life in societies. They determine, among other things, the size of the labor supply, the gender division of labor, the division between work and leisure, and the proportions of public- and private-sector employment.

What is, in the author's view, the overall fate of the political project of "decommodification"? While he endorses it at the beginning as a liberating project, a more sobering tone prevails at the end, particularly in an enlightening review of the "incompatibilities of sustained full employment" and the failure of any of the three regime types to establish a durable interclass positive-sum game. New cleavages emerge as old conflicts remain unsettled, while the three "worlds" of welfare capitalism follow their supposedly preordained trajectories. In the meanwhile, we

are left with a rich and stimulating sociological account of the internal institutional mechanics of contemporary welfare states.

State Responsiveness and State Activism. By Jerald Hage, Robert Hanneman, and Edward T. Gargan. London: Unwin Hyman, 1989. Pp. xvii + 319. \$49.95.

Edwin Amenta
New York University

Debates on public social provision continue to cover new ground and to address new questions. In the past, researchers focused on overall spending "efforts" in all countries during the post-World War II period, finding that rich countries devoted more of their income to social welfare than others. From there, scholars observed differences in spending efforts among rich capitalist nations and identified their political determinants, notably the political strength of the working class. Since then researchers have gone back in time, analyzing the timing of adoption of programs and their initial characteristics, which may have set their future courses. The theoretical focus turned to institutions, including the structure of political parties and the state.

State Responsiveness and State Activism explores further the empirical and theoretical frontiers. More than 15 years in the making, this monograph examines the public social spending policies of the four largest European capitalist powers: England, France, Italy, and Germany. On the theoretical and analytical side, this monograph goes beyond arranging the standard competitions among measures from different perspectives. The authors test socioeconomic, political, and statist models but are not satisfied with declaring overall winners. Instead they sort out the relationships among these concepts. The authors want to know not only whether the state is mainly responding to social forces or whether the involvement of the state is key in social spending. They also want to know the conditions under which the state is responsive and under which the state is active—hence the title. The authors build on the work of the political scientist David Easton, who combined and traced connections between pluralist and class-conflict perspectives.

On the empirical side, the authors trace modern public social spending from its birth, covering 1871–1968 and collecting data not often seen. The empirical analyses follow directly from the theoretical concerns and are divided into two sections. Each section approaches social welfare and then education expenditures, programs often segregated in research, from three angles: an institutional analysis, quantitative time-series analyses for each country over the entire period, and a combination of the two in which time series are broken into historical periods and by types of expenditure.

The institutional investigations are employed mainly to explain what

the authors refer to as "parameter shifts": why some relationships hold good in some periods under certain conditions, but not others. They argue that centralized expenditures will have different determinants from local expenditures and that once the state has intervened strongly in a program, that program will grow according to a different logic. The structure of the state and policies are seen as switching mechanisms that determine whether economic or political forces will expand public expenditures. In linking theories, the authors attempt to specify the institutional domain to which different theories are limited.

Although difficult to summarize briefly, the time-series results mainly support their argument. With respect to public social welfare and insurance, throughout the century, social need as they measure it spurs spending. Available resources explain neither public social welfare spending nor education spending. They find that working-class power also spurs spending, suggesting that immediate post-World War II gains were not due to war but to the mobilization of workers at this historical point. Once they break the four time series into periods, they find that centralization of administration increases the importance of institutional political forces. In contrast, the creation of social insurance makes the state more responsive to social need as they define it.

Innovative and impressive as it is, the monograph is not above criticism. For starters, it is unclear why the United States was omitted. The authors want to analyze the population of the largest industrial countries but unconvincingly dismiss the United States as exceptional and thus miss an easy comparative opportunity. In addition, for a self-consciously historical study, not enough attention is paid to time and place. No historical questions animate the analyses; the four countries are treated chiefly as cases to test relationships between variables. The institutional chapters often helpfully contradict conventional wisdom: for instance, the authors note that state bureaus exert very little control over social insurance in Germany. Yet these chapters only rarely appraise theories, a task confined mainly to time-series analyses, and the timing of adoption of key policies is treated in only a cursory fashion. There is no historical reason for the analysis to end in 1968.

Although their empirical apparatus is elaborate, sometimes they step outside it and claim support for wide-ranging theoretical arguments: "The central insight of Easton is that if parties do not deliver on their platforms then there is first realignment, second militancy, and third takeover by an extremist party. . . . We paradoxically can integrate the various pluralist models, the class conflict model and the active state thesis by understanding how centralization of the state and other characteristics of state organization produce that nonresponsiveness that generates class conflict" (p. 264). To appraise Easton's full argument, however, would require data on more outcomes than expenditures. And although their comparison is innovative, educational expenditures seem more difficult to interpret than public social welfare expenditures, especially on the issues of equality in education.

Some research decisions are difficult to understand. Independent measures sometimes veer far from theoretical referents: urbanization is claimed to operationalize Etzioni's "active society" thesis; school enrollments are claimed to approximate "family values"; the size of the service sector tests the human capital thesis. Center parties are claimed to serve the interests of service workers; strikes are defined as political or economic by their size. The three-year lags between independent and dependent measures seem too long. In some regressions autocorrelated errors are indicated but go uncorrected. All quantitative researchers must make decisions like these. Yet these choices might have been defended better.

All the same, this monograph is a fine achievement and advances the debate. Its results will be consulted and debated by experts and political sociologists alike, and we will learn more from this project and these prolific researchers.

Solidarity and the Politics of Anti-politics: Opposition and Reform in Poland since 1968. By David Ost. Philadelphia: Temple University Press, 1990. Pp. xi + 279. \$34.95.

Daniel H. Krymkowski
Dartmouth College

David Ost's book represents the latest effort to analyze the emergence of that now-historic Polish social movement, Solidarity. Much has been written on this subject during the course of the past decade, but Ost's book is an interesting departure from other work in at least three important respects. First, it is not yet another attack on the "Evil Empire"; let us hope that the end of the Cold War will eliminate such drivel. Second, the book locates the origins of Solidarity firmly in the leftist politics of the late 1960s, a politics that, on the basis of unsuccessful past experiences, rejected as unworkable programs seeking to reform state socialism. Third, the book examines Poland as a case in which a neocorporatist arrangement between state and society was attempted.

Chapter 1 argues that the opposition movement of the 1970s grew out of a desire to create *podmiotowość* ("subjectivity") in Poland. Like the New Left in the West, Polish oppositionists no longer wanted to "be cogs in some machine, ordered around by an omniscient party or by anyone else" (p. 4). To accomplish this they rejected the state and sought to form a "vital, active, aware, self-governing, and creative *society*" (p. 2), whence comes the phrase "the politics of anti-politics" in the book's title.

Chapter 2 points out how difficult it is to create such a society in either capitalist or state socialist systems, especially so in the latter owing to the totalitarian aspirations of Leninism. In the next chapter, Ost discusses the faith Polish oppositionists (now elites in postcommunist Poland) once had in Gomułka's "Polish road to socialism," a faith that ended abruptly

with the anti-Semitic campaign of 1968 and the shooting of the Gdansk workers in 1970. Chapter 4 deals with the building of civil society (as opposed to state society) during the 1970s, which meant "recreating the classic institutions of the modern public sphere: meeting places, an uncensored press, organizations to represent various interests" (p. 69). In chapter 5, Ost argues that Solidarity emerged out of this rebuilding process.

Much of the rest of the book revolves around Ost's contention that neocorporatist programs can best solve the crises that characterize contemporary Eastern Europe. Neocorporatism involves an arrangement by which "the privileged status of certain key interest groups is forced on the state from below, by independent societal institutions, and is thus established *de jure*" (p. 115). Ost argues that neocorporatism can in fact be "more democratic than what might be called 'actually existing pluralism,' if by democratization we understand the equalization of political opportunity and not the practice of free elections alone" (p. 118).

Ost maintains that Solidarity ultimately drifted toward such a formula, only to be stymied by martial law. The setback was temporary, however: neocorporatism reemerged in the historic Roundtable Accords of March 1989. The incredible atrophy of state socialism during the 1980s ultimately lead to the formation of the Mazowiecki government, a neocorporatist coalition of Solidarity and the Communist party.

When he finished the book in October 1989, Ost felt that neocorporatism was still the most likely course for Poland. With the benefit of hindsight, however, we can see that the party's effort in this direction was too little too late. The Polish people may have been willing to settle for such a program before martial law, but not now. In early 1990 the complete removal of the Communist party began. This process is continuing with the November 1990 presidential elections, and it will be complete once parliamentary elections are held in the spring of 1991.

No one, of course, anticipated the lightning pace of change in Eastern Europe, and Ost's incorrect predictions do not constitute a weakness of the book. His argument does, nevertheless, suffer from a few problems. First, I believe Ost overemphasizes the *political* nature of Solidarity. Intellectuals often concentrate more on Solidarity's efforts to guarantee civil liberties than on its goals to improve the standard of living for workers. These objectives are obviously not unrelated, but neither are they perfectly correlated (witness the many "warning strikes" occurring in Poland during 1990). The fact is that strikes by workers were often staged to protest things such as higher food prices, the lack of apartments, the unjust dismissal of colleagues, and the abysmal conditions in factories.

But there is a more serious shortcoming of the book: Ost emphasizes that Solidarity's intellectual origins are to be found in the leftist politics of the late 1960s. He notes that in the West the Left was "co-opted" (p. 6), while in Poland it "stayed the course." But, by 1989, the Left in Poland, too, had been co-opted. Ost points out that people who once believed in self-management became conservative property-rights theo-

rists (p. 168). However, he does not explain why these transformations occurred. After the detailed attention he gave to Solidarity's leftist roots early in the book, the brief discussion in chapter 7 of such mind-boggling flip-flops is rather disappointing.

Challenging the Boundaries of Reform: Socialism in Burlington. By W. J. Conroy. Philadelphia: Temple University Press, 1990. Pp. viii + 264. \$39.95.

John B. Hannum
University of Kentucky

This analysis of the socialist "experiment" in Burlington, Vermont, under the leadership of former Mayor Bernard Sanders is interesting for those concerned with the social movement sector. Conroy traces the development of the Sanders administration's eight years in power (1981-89), and, as he notes (p. 3), it is "a story of few triumphs and great frustration."

He adopts a post-Marxist approach that focuses on nonclass demands for reforms and looks at the conflict between Sanders's more traditional brand of socialism and the new-social-movements sector. He sees this conflict as essentially rooted in the changing nature of the middle class away from a class location near the means of production.

Thus, the postindustrial class struggle has shifted away from being a struggle against the usurpers of surplus value toward a struggle against a long-term accumulation strategy designed to stabilize the rate of profit and the concomitant bourgeois cultural hegemony that serves to legitimize the ideology of mass production and consumption based on exchange value.

The new social movements tend to focus instead on three specific goals related to their concern with the reproduction of the social order: (1) collective consumption based on use value, (2) reassertion of cultural identity, and (3) political self-management. That such movements would come into conflict with the growth-oriented productivist strategies of more "traditional" socialism such as that espoused by Sanders is scarcely a surprise.

Conroy takes the reader through a variety of issues that the Sanders administration confronted: economic development, the search for a progressive tax, foreign policy efforts, and issues of sexual politics. He utilizes a "spectrum" of reform ranging from what he terms "democratic structural reform" through liberal reform to a category he calls "reactionary reform."

In none of the cases above does Conroy see that a democratic structural reform was achieved by the Sanders administration. However, as Conroy notes, there were at least some liberal reform achievements. In addition, reactionary reforms that would have benefited capital were at least

averted in the short run. He notes that those issues tied to demands of the new social movements fared rather better than those tied to confrontation with capital.

One of the more interesting aspects of this analysis is how Conroy has rooted the concept of local autonomy in the federalist system. As he notes, there is a general lacunae of this sort of analysis, particularly among neo-Marxist writers, who have tended to ignore the midlevel role of the states in the federal system.

The book ends with a prescription for a Left capture of state government and the installation of a more democratic form of government. This seems to me to be somewhat idealistic and unlikely, but I like his ideas about how the Left could go about doing this. Overall, this is a worthwhile book about an interesting era in Vermont politics.

The Peasant Family and Rural Development in the Yangzi Delta, 1350–1988. By Philip C. C. Huang. Stanford, Calif.: Stanford University Press, 1990. Pp. xiii + 421. \$49.50 (cloth); \$16.95 (paper).

Martin King Whyte
University of Michigan

This impressive study is a companion volume to the author's prizewinning 1985 monograph, *The Peasant Economy and Social Change in North China* (Stanford, Calif.: Stanford University Press). Both studies share many features. They are based on an unusually wide range of sources: archival materials, 1930s ethnographic surveys, and contemporary interviews in selected villages. Huang also deals with a similar range of "big questions" in both studies: What were the major trends in labor organization, stratification, and peasant livelihoods over centuries? Why did increasing commercialization in the Chinese countryside not lead to the rise of capitalism? What was the impact of imperialism and world-market forces on Chinese peasants?

There are a number of important departures in this new work. First and most obvious, this study deals with peasants in the Yangzi Delta, not the relatively poorer North China plain. Since the two regions differ in a wide range of particulars (e.g., with tenancy but very little hiring of labor in the Yangzi Delta vs. small peasant farming with hired labor but very little tenancy in North China), the new study constitutes a major test of the ideas the author developed in his earlier work. The other major innovation is in the time span covered. The North China study focused on the Qing and republican periods (1644–1949). This new work extends the time frame backward to include the Ming dynasty and forward to include the People's Republic of China, in both the collective and reform eras.

Huang's major argument in both studies is that most conceptions of rural development originating in the Western experience are misleading

when applied to Chinese family farming. He proposes an alternative conception drawn from the works of A. V. Chayanov, Ester Boserup, and Clifford Geertz. Chinese agriculturalists are not rational cost-benefit analysts trying to gain economic advantage, but individuals trying to meet family needs under very constrained circumstances. Commercialization occurred in rural areas not so much because of a desire to take advantage of new opportunities and increase incomes, but because of population pressure. Peasant families increased their labor inputs even when the marginal returns of such added efforts approached zero. The result, in Geertz's terminology, was agricultural involution.

Huang extends this line of thought beyond his predecessors by distinguishing agricultural growth, intensification, involution, and development. Growth refers simply to increased agricultural yields. Intensification refers to an increase in output that grows at the same rate as labor inputs. Involution, as already noted, refers to a declining ratio of output to labor inputs. Finally, development refers to output increasing more rapidly than labor inputs.

Huang argues that population pressure produced increased involution during most of the imperial and republican periods. However, considerable growth and commercialization also occurred, producing "involutionary growth" or "growth without development." In examining the collective era in the People's Republic, Huang argues that this situation persisted. Considerable growth occurred, spurred by improvements in the rural infrastructure, but, because the population also increased dramatically, the result was further involution.

This situation changed in a significant way only in the post-Mao period, according to Huang. In what is perhaps his most controversial claim, Huang argues that in the Yangzi Delta the improvements that occurred in the 1980s were due to rural industrialization and not to the superior efficiency of the revived family farming. The resulting situation, paradoxically, was development without growth, as rural incomes shot up while agricultural production stagnated. Huang argues that the problem in the Mao period was not the inefficiency of the collective system but simply the unwillingness of the leaders then to allow peasants to leave agriculture.

As with the North China study, there is much here to stimulate research and debate. While I am generally impressed by the evidence and arguments Huang presents, I do have some quibbles. The local survey evidence relied on for this study is more sparse than in the North China study, and, as a consequence, the reader comes away with less of a clear picture of rural social organization in the Yangzi Delta and how it varies within and across localities. When the author tries to compensate for this thinner data base by including examples from North China and other areas, the issue is more confused than clarified. Much of the analysis of the post-1949 period is based on the single village in which Huang did extensive interviewing, and the reader is entitled to wonder what was going on elsewhere in the Yangzi Delta.

My major criticism of this study concerns the claims made about the reform era. While I readily concede that rural industrialization has been the major source of improvement in peasant incomes, it seems to me odd to belittle increases in incentives and efficiency that have occurred in farming. Even if yields have stagnated in the Yangzi Delta, if a considerably smaller labor force is producing those yields, then this seems to be impressive agricultural development as Huang defines it.

Despite such reservations, this is a complex and thoughtful study that serves as a worthy companion piece to the author's North China study. Now scholars of the contemporary agricultural system as well as students of China's rural past have to contend with the work and ideas of Philip Huang.

The Anti-politics Machine: "Development," Depoliticization, and Bureaucratic Power in Lesotho. By James Ferguson. Cambridge: Cambridge University Press, 1990. Pp. xvi + 320. \$49.50.

Bruce M. Koppel
East-West Center

During the 1960s and 1970s, development assistance and cooperating governments in the "Third World" supported planned-development strategies focused on more capital-intensive agriculture. In the 1980s, this strategy was supplemented by a focus on alterations in government-economy relationships summarized by the phrase "getting the prices right." What has happened? First, many of the development projects have not worked (in terms of their own objectives) despite a vast accumulation of evaluations pointing to recurring problems in design and implementation. Second, while most projects routinely acknowledge precepts of "beneficiary" participation and organization, development strategies consistently attempt to depoliticize both the nature and consequences of the "development" achieved. This position ultimately undermines the magnitude of most "participatory" gains because it is directly associated with significant increases in the state's role in project areas.

To date, explanations of these paradoxes have primarily been combinations of technical and political economy critiques. These explanations have offered significant insights, but there is much that has not been explained about the practice of planned development. James Ferguson has written an important book that advances understanding not simply about the performance of planned development, but about what planned development actually is.

The book's focus is on an integrated agricultural-livestock development project in Lesotho. Ferguson analyzes the development discourse by the donors and by the government of Lesotho and what he calls the "academic" discourse, which refers to assessments of the discourse between the donors and the government, between the government of

Lesotho and the affected people, and among the affected people. With a significant intellectual debt to Foucault, Ferguson focuses on this question: Why and how is it that even when the projects fail, there are significant and lasting consequences in terms of strengthening the roles of bureaucratic and military power?

He begins with an analysis of "the 'development' apparatus" that describes the conceptual construction within which Lesotho is forced to fit as a "less developed country." Central to this construction is a portrayal of Lesotho as essentially undifferentiated, peasant, noncommercial, and unintegrated into wider market-driven relationships. Since these characteristics are all "problems," planned development has to create more commercial, market-oriented activities and institutions. Ferguson demonstrates that this portrayal is not (and for many decades would not have been) an accurate description of Lesotho. He reminds us of considerable research analyzing the significance of Lesotho as a labor reserve for South Africa. He next looks at the "deployment of 'development'" examining how the project actually worked, and how different parties understood and manipulated the project. Finally, he asks why, despite the project's failure, did the strength of the state in the project area grow?

There are many important insights in this book about how planned-development projects deny their embeddedness in local political structures and struggles, about the consequences of maintaining development constructs that are significantly at variance with "objective" conditions, and about how state power expands through a process of depoliticizing the significance of technical and administrative change. Analysis of the nexus between proletarianization processes and the maintenance of a "traditional" livestock system and "bovine mystique" is an especially good piece of social research, on its own and for what it illuminates about the incongruities of development discourses in and about Lesotho.

There are some important limitations, some of them identified by the author. We know quite well the development construct utilized by the donor, but we do not really understand how this is actually developed and maintained, especially in the light of massive "counter-factual" evidence. Without taking anything away from the excellent ethnographic research presented, the line (and the contrast) between what he calls "academic" discourse and the "development" discourse may not be as sharp as he implies. Development agencies are not a priori less diverse than many university departments. The development agencies may be getting bad advice, but, as Ferguson's own analysis suggests, it would be too simple to conclude the problem is only inappropriate staffing, inadequate advice, or, for that matter, bureaucratic inertia or even ideological imperatives. Moreover, contrary to impressions that can be gleaned from the book, the social construction of knowledge within the academic discourse is hardly apolitical. Similarly, relationships between knowledge construction and understandings of praxis within the academic discourse are far from straightforward.

However, the limitations in this book are significantly exceeded by the book's many positive attributes, the most important of which is the way the planned-development process is problematized. The book is not just for specialists on African development, although they, whether in universities or development agencies, will find much to think about. It is provocative for a wide range of sociologists with development interests.

Power and the Ruling Classes in Northeast Brazil: Juazeiro and Petrolina in Transition. By Ronald H. Chilcote. Cambridge: Cambridge University Press, 1990. Pp. xvii + 383. \$64.50.

Kathleen C. Schwartzman
University of Arizona

There are at least three possible books in this offering by Cambridge. First, there is a study of changes in community power structures. Second, Chilcote provides a comparative study of how two towns, with different forms of domination (paternalistic in Juazeiro and patriarchal in Petrolina), respond to penetration by the state and by international capital. And third, "the study of communities like these provides an opportunity to test some hypotheses about capitalist development and underdevelopment" (p. 15), such as whether backwardness is an expression of underdevelopment or the persistence of "precapitalist" modes of production, and the role of merchant capital in the transition to capitalism.

The bulk of the interviews for this study were conducted in 1971 with 118 members of the ruling classes of two towns in the backlands of northeast Brazil. The data collected consist of network maps, which identify leaders, influentials, and decision makers, and the results of the questionnaire. In addition, a wide range of background information from sources, such as municipal records, family genealogies, archives, and newspapers, was used to learn about the history and "goings-on" of the region.

Of the 68 tables, 50% present attitudes and opinions of the decision makers on subjects ranging from ruling-class views on capitalism (percentage agreeing with statements such as, "The well-being of the community depends mainly on its industry and business" [p. 202]) to their familiarity with past conflict ("Have you heard of . . . Lampiao?" [p. 242]). Fifteen percent of the tables describe socioeconomic and demographic characteristics of the rulers, 18% give data on the political parties and municipal power structure, and 18% described what might be called structural data. There are some nice enclaves of the Brazilian experience in the book and a moving discussion of the consequences of drought in the northeast of Brazil, the human disasters that followed the construction of the Sobradinho Dam, and the renewed foreign-capital interest in the copper deposits.

Three concerns struck this reader. (1) Chilcote utilizes attitudinal data

for evidentiary service on questions about social structure. "Recognition of these dependency relationships" by members of the ruling class (p. 224) does a poor job of revealing the nature and extent of the dependency relationship. (2) Systematic time-series analysis would have strengthened the book. These snapshots of structural changes are evidence for either studying community changes over time, or evaluating the effects of state and/or international capital penetration. Although some of the lists of municipal leaders record votes for a number of different years (pp. 257, 266) and some changes were observed as a result of a "revisit," the longitudinal perspective does not constitute a strong organizing principle of the book.

(3) The book goes furthest in its comparative analysis of the two cities. Chilcote offers periodic interpretations of how the paternalistic city differed from the patriarchal one. For example, the Coelhos, the dominant family of the patriarchal city, had managed to block the national welfare and social security agency from establishing a local office in Petrolina (p. 271). At the same time, the patriarchal city was the one in which the needy could get their prescriptions filled by the mayor, while the needy of paternalistic Juazeiro begged in the street. In contrast, however, the two-city summaries sometimes are presented in their commonalities ("Juazeiro-Petrolina area" [p. 170], or that 86.4% of the ruling classes of Juazeiro and Petrolina considered banks very important institutions in their communities [p. 146]). Ten percent of the tables do not distinguish the two towns, and a number of tables present a third column that combines the numbers from the two cities.

This 1990 publication of the "early Chilcote" (research was conducted in the early 1970s) follows from a very different paradigm than the 1984 publication of the "late Chilcote." In the 1984 book, *Theories of Development and Underdevelopment* (1984), the author argues for an understanding of the Third World that "emphasizes exploitation and oppression, lack of technology and development, underdevelopment brought about by colonialism and imperialism, and dependency upon the dominant capitalism system" (p. 2).

The Man-made City: The Land-use Confidence Game in Chicago. By Gerald D. Suttles. Chicago: University of Chicago Press, 1990. Pp. xiii + 312. \$24.95.

Harvey Molotch
University of California, Santa Barbara

Anyone who has read Gerald Suttles greets a new work by him with expectations of solid fieldwork, taut exposition, and theoretical advance. In this book, different in method, analytic goal, and writing style from his previous projects, Suttles moves beyond research on neighborhoods toward the political and social organization of the city itself.

His primary strategy is the use of a series of land-use decisions to approach the larger urban structure. This is a wise maneuver; it is the single issue that arises across race and class; it activates the business community, political institutions, and voluntary associations of all sorts. By tracing the fate of specific projects across the city, the whole social fabric can be exposed to analysis.

For Suttles, the city is "man-made," a phrase that seems to mean (however gender biased) that land use does not respond to any laws derived from ecological reasoning or even limits imposed by resource shortage. Instead, land use evolves from machinations of human actors battling through the symbolic arena to further their own careers, make their own profits, and display their own rhetoric.

Various strands of this doctrine have appeared in the literature before (e.g., Norton Long's city as an "ecology of games" and certain versions of critical urban sociology). Suttles's treatment, although quite ambiguous to me, is distinctive in its constant disappointment that the city lacks decision-making systems that are objective, detached, and reasoned. For Suttles, such value-free planning is evidently not a conceptual fiction; it thus serves as a model for judging the land-use failings that come under his purview.

He is particularly distressed with the role of fickle and posturing politicians and of activist groups worried about redistribution. His sympathies lie (frankly acknowledged) with the city's development elite who "seemed to possess the most detached, the most reasoned and articulate land-use strategies" (p. 283). Like them, he measures the betterment of cities in terms of the volume and maintenance levels of buildings. His index of a project's value, whether residential or commercial, is its success in renting or selling units that are built and in stimulating still more such development. The frequent need of such projects to disrupt existing users and the granting of subsidies from the city, state, and federal governments do not cause him to inquire about net social utility or benefit distribution.

Suttles is a Chicago booster (albeit a cranky one); he laments that city's slippage from its Second City berth in the national rankings. He thus thinks that "systematic planning . . . should focus on how to maintain or improve a city's standing in the urban hierarchy, . . . how to form or reform the city's physical plant to meet the competitive challenges in a changing national economy" (p. 83). His preoccupation with Chicago's decline causes him to link its troubles, including the deprivations of its minorities and poor, to this cause. But a greater sensitivity to cities beyond Chicago, including those gaining population at its expense, would reveal that development does not solve these problems and indeed, as in the boom-and-bust syndrome of places like Houston, only exacerbates them.

A fixation on the standing of a city thus beclouds the possibility that aggregate growth can easily occur at the expense of more sensible goals. The literature now abounds with strong evidence that specific projects and development overall do not necessarily improve the lives of urban

majorities, the fiscal base of cities, and certainly not their physical environments. While Suttles closes his book by acknowledging that "the restraints that local community groups impose on them [the local investors and their political allies] are essential," his analysis does not specify how or why this should be so. Such restraints thus tend to appear in his text as mere noise.

In moving through case after case where developers do not, as it turns out, get their way, Suttles provides an antidote to any facile treatment of cities as mere instruments of cohesive local elites. He may also be correct in portraying their "progressive" opponents as spoilers of worth initiatives. Those working for the last two decades in urban theory need to hear this message, particularly scholars like me who emphasize the neo-Marxian versions of urban political economy. But Suttles, although attempting to situate his work broadly in urban theory, completely ignores even the existence of almost all such work—no mention of people like M. Castells, J. Feagin, the Fainsteins, R. Friedland, M. Gottdiener, M. Harloe, D. Harvey, R. C. Hill, M. Mayer, J. Mollenkopf, C. Pickvance, S. Sassen-Koob, M. P. Smith, E. Soja, R. Walker, or A. Whitt. By ignoring these most creative and productive elements of urban analysis, which represent work that is utterly dominant outside the United States and particularly beyond Chicago, Suttles inhibits the possibility of his research serving to inform and advance the larger enterprise. This makes *The Man-made City* rather parochial in its geographic scope, issue agenda, and intellectual reach.

Performance as Political Act: The Embodied Self. By Randy Martin. Foreword by Stanley Aronowitz. New York: Bergin & Garvey Publishers, 1990. Pp. xii + 211. \$45.00.

Loïc J. D. Wacquant
Harvard University

Performance as Political Act is a very ambitious book: its aim is to show that, insofar as domination in advanced societies proceeds through subjugation of the mind, the body constitutes an untapped "site of resistance" on which to found a new political practice, of which performance arts can be the catalyst. Martin promises much but ultimately delivers little, and, Stanley Aronowitz's ringing prefatory endorsement notwithstanding, this study does not move us very far toward its professed goal.

The reason for this is the glaring conceptual and substantive gap that separates Martin's diagnosis of the suppression of the body in social theory, his sweeping statements on the evolution of the body-mind dualism in the history of capitalism, and his cursory account of the politics of theater and dance. The result is a puzzling and frustrating work that ends up making complex issues seemingly downright intractable.

Martin begins with a selective overview of the treatment—or eli-

sion—of the body in recent social and cultural theory. Chapter 2 shows how semiotics and sociology concur in portraying the body as irrational, presocial, and outside of communication and how these disciplines justify its repression as the necessary counterpart to the socialization of the mind. Thus, in semiotics (Freud, Peirce, Saussure, Barthes, Lévi-Strauss), the body disappears to make room for the sign, while sociology (Mead and Parsons) loses the body in the rigid opposition between the individual and society. Chapter 3 pursues this argument by taking up phenomenology and poststructuralism. Merleau-Ponty is faulted for omitting politics from the arena of autonomy that bodily experience creates and for eventually restoring the primacy of consciousness over desire and the unconscious. In Lacan and in Deleuze and Guattari's "libidinal economics" the materiality of the body is downplayed in favor of its role in the process of signification. The theories of Derrida and Foucault are also found wanting because they leave no possibility for the body to have autonomous impulses toward struggle. Martin's critique is informative and at times penetrating but too sketchy to allow for a balanced judgment. Not all of the theorists he criticizes were centrally concerned with developing a political theory of the body, and those who were (among whom Mauss, Elias, and Bourdieu are conspicuously missing) are not examined in sufficient depth.

The second part of the book outlines changes in the relation between body and mind with "turns" in the historical trajectory of capitalism. Martin's claim is that "the division of mind and body parallels the development of capitalism" (p. 51). Drawing mainly on Bakhtin, he contends that, in early capitalism, body and mind were indissolubly joined and the body highly visible. The coming of industrial capitalism freed the body from nature only to harness it to capitalist production. With consumer capitalism, "the body is veiled as an object of social control and mind passes from something meaningful as signified to a seemingly endless stream of signifiers" (p. 52). But the body "overflows" the constraints of capitalist consumption and there opens up a new space for resistance as an autonomous agent. The problem with this loose periodization is that it posits a uniform, quasi-mechanical correspondence between stages of capitalism and the body-mind articulation without providing an explication of how that relation obtains.

The third section of the book describes the making of a dance performance from the standpoint of its producers (including the author). It contains insightful observations on the dynamics of conception by execution, on bodily imitation, communication, and apprehension, and on the social production of artistic intention and improvisation within an autonomous and labile community of dancers whose kinetic commitment binds them into a "social body." Unfortunately, these observations and the brief study of political theater in the Soviet Union in the 1920s and in America in the 1960s do not succeed in revealing how the opposition of performers to artistic authority transforms anything beyond the stage or how it might be generalized and linked to a coherent political project.

Again, the discussion of Meyerhold's stage innovations is, from a theatrical standpoint, interesting and competent. Its relation to the argument of the book, however, is never clarified, and its sociological upshot remains hidden behind the overly abstract categories Martin uses. The final chapter is aptly characterized as a "rumination on the symbolic dimension of the political" (p. 162), which produces little more than abstruse and perplexing propositions.

That "the body's agency lies in its performance" does not, *eo ipso*, make it a "source of political activity" and an "agent of social change" endowed with its own "agenda" (pp. 8, 9, 2). Martin celebrates the body as the last oasis of resistance, a protected zone of self-definition and authenticity—a "ground uniquely held by people's oppositional energies" and ruled only by the free impulses of "desire" (p. 8). Yet, it is difficult to say just what it is that the body resists: class domination, the hegemony of the sign, the "dominance of abstraction," or capitalist modernity?

The analytical disjunction between the critical overview and theoretical arguments of Martin and his two focused case studies explains that the whole comes woefully short of the sum of its parts. A serious further drawback is that, far from overcoming the Cartesian dualism of body and mind he rightfully laments by means of mediating concepts or use of an analytic strategy that shows their mutual interpenetration or constitution, Martin ends up entrenching it. Finally, he never entertains the plausibility of the thesis opposite to his: namely that, far from being the "site of resistance," the body constitutes the Archimedean point of the most effective form of domination, that which operates through the immediate coincidence of embodied structures and objective structures and obtains below discourse, consciousness, and signification—that the body is the best support for the exercise of "symbolic violence."

Performance as Political Act has the virtue of highlighting the rationalistic bias of much of social theory. Its failure to move beyond this indictment to articulate a social theory of the body should not distract us from the importance and urgency of that project.

Cultural Theory. By Michael Thompson, Richard Ellis, and Aaron Wildavsky. Boulder, Colo.: Westview Press, 1990. Pp. xvi + 296. \$49.95 (cloth); \$16.95 (paper).

Elisabeth S. Clemens
University of Arizona

At first glance, *Cultural Theory* seems an unlikely title for the argument laid out by Michael Thompson, Richard Ellis, and Aaron Wildavsky. Neither the thick description beloved of social historians and anthropologists nor the dense vocabulary of literary criticism is in great evidence. Instead, the reader is presented with a formal analytic argument, com-

plete with its own compatibility condition, impossibility theorem, and requisite variety condition. But although the style of presentation may seem out of place in the field of contemporary culture studies, the authors' concerns and contributions are not.

Cultural Theory is a brief for a unit of analysis—the “way of life”—that combines both “cultural bias” (shared values and beliefs) and patterns of interpersonal relations. Building on the work of the anthropologist Mary Douglas, the authors claim that there are five basic ways of life, derivable from the two dimensions of group and grid: “*Group* refers to the extent to which an individual is incorporated into bounded units. . . . *Grid* denotes the degree to which an individual's life is circumscribed by externally imposed prescriptions” (p. 5). High grid/high group produces a way of life labeled hierarchy; high grid/low group, fatalism; low grid/low group, individualism; low grid/high group, egalitarianism. The hermit, representing the final way of life, “escapes social control by refusing to control others or to be controlled by others” (p. 7). Using these categories, the authors confront the “not in my tribe” syndrome of cultural studies that defend endless particularity and uniqueness at the expense of the generalizing power of social theory. At the same time, their insistence that no society is monolithic, that every society is a combination of ways of life, provides a valuable model of how to appreciate variety without being overwhelmed by it.

Armed with their typology, the authors first elaborate their brand of cultural theory by exploring the connections between particular ways of life, views of nature, the social construction of needs and resources, and the formation of preferences. Taken together, these arguments provide a powerful model of the “reciprocal, interacting, and mutually reinforcing” relation between patterns of beliefs and values and patterns of social relations. This model also accommodates change through a theory of surprise, proposing—in the style of Kuhn's theory of scientific revolutions—that, to the extent that the expectations generated by a particular way of life are not confirmed by reality, individuals may be pushed toward new ways of life. This analysis has the further virtue of pointing out that any given macrosocial change may be the product of many different configurations of microchanges.

The remainder of the book is devoted to two demonstrations of the explanatory power of this model. The first takes the form of a rereading of classical statements of social theory and contends that modern social theorists have privileged individualism and hierarchy in constructing their typologies, while marginalizing examples of egalitarianism and fatalism. The second consists of reinterpretations of major studies in political culture that document the applicability of the categories derived from the dimensions of grid and group. The boundaries between different ways of life begin to blur, however, as the authors repackage political history in their preferred set of boxes. As more and more cases are described as alliances of ways of life, one begins to wonder if the ways of life are really limited to five. Provided there was a comparably ardent

set of champions, could not an equally convincing typology be developed if grid and group were trichotomized?

As the authors themselves note, their argument raises as many questions as it answers. In particular, it leaves open the question of what we are to make of the stuff that most sociologists have treated as "culture," the dense webs of meaning embodied in form that characterize particular places at particular points in time. For example, is it sufficient to distinguish the forms of individualism and hierarchy within modern bureaucratic societies without identifying the type of "rationality" that characterizes this particular combination of individualism and hierarchy from other historically specific combinations of the two ways of life? Furthermore, "culture" is important for understanding why certain types of people adopt certain ways of life. The authors' description of egalitarian attacks on individualism evoked images of 19th-century feminists proclaiming the virtues of sisterhood in opposition to the individualistic, but (just as important) male, market. Such general cultural constructs may also create preferences for certain microchanges when a way of life encounters too many surprises. To return to the example of 19th-century feminism, when the bonds of sisterhood proved politically ineffectual, women tended to adopt bureaucratic models of organization that embodied hierarchies of class and education rather than to move toward the strongly gendered model of the political entrepreneur. Thus, to understand the distribution of individuals across ways of life as well as the particular configuration of ways of life within different societies, the cultural theory of grid and group must be joined with a recognition of the cultural constructs that inform relations among ways of life and make sense of transitions between them.

Charisma. By Charles Lindholm. Cambridge, Mass.: Basil Blackwell, 1990. Pp. x+238. \$29.95.

John R. Hall
University of California, Davis

As crucial as charisma is to sociological theory, it has received little attention as such. Most analysts simply draw on Max Weber's model in explaining various social movements. *Charisma* is a welcome effort to shift the discourse toward a fundamental reexamination. Lindholm surveys a wide range of social thinkers—from philosophers such as David Hume, the utilitarianists, and Friederich Nietzsche to hypnotists, crowd psychologists, Freud, and contemporary "borderline personality" theorists. This "essay on the history of ideas" also has a "more pragmatic" aim—"the extraction of a model of the emotions" (p. 8) that can be used in comparative research.

Sometimes the two aims become blurred. The reader should not expect a formal intellectual history. Instead, Lindholm selects thinkers whom

he believes have a contribution to make, whether or not they explicitly discuss charisma, and he ignores others who might have helped: Herman Schmalenbach, Karl Mannheim, and Bryan Turner come to mind. The theories sometimes receive assessments that only make sense if one posits a teleology toward a particular model of charisma. Like Talcott Parsons in *The Structure of Social Action*, Lindholm seems most taken with those who serve his purposes. Although Parsons never receives mention, Lindholm mirrors his treatment of charisma as the bridge between Weber and Émile Durkheim but focuses on communion rather than authority as the key. Weber, clearly the central theorist of charisma, seems to get in the way. He did not focus enough on emotional process, and, to Lindholm, his account of rationalization seems unilineal.

Lindholm's own model centers on "charismatic involvement" as one resolution of "an existential tension between deep impulses toward attachment and separation," described by Freud. In charisma, "impulses toward merger are met in the effervescent collective emotions aroused by expressive charismatic figures" (pp. 88–89). This model Lindholm applies to empirical analysis, beginning with three notorious cases of charisma in the modern world—Hitler's Nazi movement, the "family" of Charles Manson, and the People's Temple led by Jim Jones. These cases are contrasted with traditional shamanism and the millenarian movements of modernizing and colonial societies. Lindholm concludes with an assessment of pseudocharisma and the prospects of authentic charisma today, when, he argues, charisma is publicly suppressed yet personally pursued as a vehicle of transcendence.

There are real strengths to developing a model of charismatic involvement out of more fundamental emotional processes. It renders understandable the socioemotional interchanges that often accompany charisma. Rather than draw a sharp boundary, the model demonstrates affinities between charisma and romantic love, therapy, and even consumerism. Instead of an isolated phenomenon, charisma becomes a central dynamic, the form of which can be linked to the structural conditions under which it occurs. *Charisma* offers a thought-provoking vision of the connections between love and ecstasy and societal processes.

Yet there is a tangle of problems. Because the model focuses on "charismatic involvement" rather than charisma per se, the discussion does not go far enough toward establishing what makes charisma distinctive. At least two significant aspects of charisma itself seem undertheorized—first, play (e.g., in the work of Johan Huizinga) as a possible core motif and, second, prophecy as a cognitive process of reordering cultural meanings. The conflicting assertions of various theorists are never really tested on the basis of a coherent theory. The analysis of empirical cases proceeds by reference to theorists largely when their ideas are confirmed, and little effort is made to seek out negative evidence. Both evaluation of the model and a negative assessment of charisma in the modern world are influenced by the focus on exemplars of evil—Hitler, Manson, and Jones—while pacifistic charismatic communes are given short shrift.

Even the case studies amount to sketches that cannot do justice to the empirical questions they raise, and the broader sociological analysis sometimes seems off the mark. In the case of Hitler, for example, Lindholm offers a useful interpretation of charismatic features yet can hardly be said to have adjudicated contentions among charisma and other (e.g., rational choice) explanations of Nazi recruitment and commitment. For Jim Jones's followers, Lindholm depends heavily on accounts from defectors from the People's Temple to depict "ecstatic communal selflessness" (p. 137), without acknowledging these sources' vested interest in magnifying charisma as a way to explain their own unconventional behavior while in the group. Finally, Lindholm's vision of a future for charisma within " 'world-affirmative' communities offering camaraderie, participation, and identification along with an ethic of worldly success that supports the status quo" (p. 188) seems to have little basis in the substance of his analysis. In my view, however, the core analysis of *Charisma* stands despite such problems. We have at hand a fascinating account of diverse social processes linked by emotional interchanges that surround charisma. Lindholm's study will provide an important touchstone for all subsequent discussions of charisma.

Backdoor to Eugenics. By Troy Duster. New York: Routledge, 1990. Pp. xii + 201. \$39.95 (cloth); \$13.95 (paper).

Stanley Aronowitz
City University of New York

Backdoor to Eugenics is a careful, almost cautious, study of the shift from the predominance of social and environmental explanations and treatments for health and related pathologies in the United States to theories that emphasize genetically inherited propensities, primarily by race, class, and ethnicity. Troy Duster's argument is that hidden economic, political, and ideological interests account for the tacit, although rarely overt, return to the once discredited "science" of eugenics. Duster adduces considerable evidence of the recent and subtler return of scientific correlations, largely by means of statistics, between class and race and such categories as intelligence, mental illness, and mortality. According to Duster, this regrettable turn of events results from the deployment of molecular biology over the past three decades and the technologies that make it possible, particularly bioengineering. This book concomitantly provides considerable weight to the argument that genetic accounts are constitutive of contemporary conservative thought.

Duster's caution consists in his refusal to impute malicious intention to those who have insisted that genetics is the principal cause of a wide range of diseases, particularly heart disease, infant mortality, cancer, and mental illness as well as of the highly publicized increase in crime and decline of educational performance, especially among minorities and

the poor. Instead, employing insights derived from recent work in the sociology of scientific knowledge, he shows that, in addition to fame, fortune, and corporate profits—factors he does not ignore—biological explanations for social and medical pathologies are deep-seated ideologies, among both scientists and nativist social movements, that span the 19th and 20th centuries. Duster provides a useful history of the use of eugenics arguments, which were based on imputations of the connection between ethnicity and IQs measured by faultily administered tests, to restrict immigration in the first decades of this century. He also performs skillful, sometimes brilliant, deconstructive analyses of the key studies that have been used in the current eugenics revival. Where the earlier eugenics was employed primarily against Jews and other European immigrants, current statistical studies, directly and indirectly, serve social policy formulations that exacerbate racial discrimination and official neglect of the problems of African-Americans. This is particularly evident in the controversies surrounding sickle-cell anemia, for which tests have become mandatory in many states (while tests for Tay-Sachs disease, to which Jews and Greeks are especially susceptible, have been administered voluntarily) and the incredible 40-year Tuskegee study of the incidence of syphilis among blacks.

But the heart of the book is a detailed study of the social consequences of the technological applications of molecular biology. Duster is careful to distinguish the valid uses of genetic information from those that serve political and ideological interests. For example, he argues that the use of amniocentesis becomes suspect when parents try to select for gender or when abortion is employed to "screen out" potentially benign characteristics such as recessive Tay-Sachs disease or sickle-cell anemia genes. Furthermore, he deplores the increasing tendency of states to enact legislation that mandates genetic screening that discriminates against particular groups. However, the limited use of the technology for the purposes of identifying serious defects are, for Duster, uncontroversial. Similarly, he appears to endorse voluntary genetic screening that can aid in identifying tendencies that may help individuals and physicians make intelligent medical choices to prevent severe consequences.

More egregious is the persuasive evidence that local and national governments, scientists, the medical establishment, and major corporations in health-related industries have fostered public acceptance of genetic explanations as the root cause of social inequality. They have displaced the recent consensus that the high incidence of crime, educational underachievement, infant mortality, and a variety of life-threatening diseases among blacks were manifestations of poor housing, bad health care, and unemployment, among other poverty-related conditions. The federal government has now undertaken expensive and massive programs such as the Genome project to record the genetic characteristics of the U.S. population in the belief that such records will assist in the fight against various diseases. According to Duster, the project presupposes what remains to be proved: that genes account for the increase in certain dis-

eases. The huge federal government commitment to the project also tends to undercut efforts to combat these diseases by improving social and economic conditions for the nation's poor.

Duster insists that, even before gene-related technologies were developed, we had adequate knowledge and technologies to address many of these problems. Citing historical evidence as well as contemporary, he argues that environmentally related policies—such as improving diet, providing adequate sanitation and clean water, reducing drug, alcohol, and tobacco use, and removing toxicity at the workplace—are more effective than expensive and unproven genetic accounts. Duster tells us he is not offering solutions but seeks to stimulate a debate. He has succeeded admirably.

Promises in the Promised Land: Mobility and Inequality in Israel. By Vered Kraus and Robert W. Hodge. New York: Greenwood Press, 1990. Pp. xiii + 203. \$39.95.

Robert A. Hanneman
University of California, Riverside

Promises in the Promised Land reports results of the 1974 Israeli Mobility Survey and is a solidly crafted analysis within the Blau and Duncan tradition. It might have been only a minor footnote, as the data are 16 years old and portions have been previously analyzed. The focal points in the analysis, however, make this book of broader interest. Particular attention is given to issues (large-scale immigration, race and ethnic differences, and the role of education) that continue to be of both theoretical and applied importance elsewhere. This book is also notable as a fine exemplar of the contributions of the late Robert W. Hodge to stratification studies, as noted in Judah Matras's foreword.

The introductory chapter gives an overview of the status-attainment literature with particular attention to how ascriptive stratification may be understood within the approach. The second chapter provides a very useful descriptive and historical survey of the Israeli situation. The largest portion of the book (chaps. 3–6) consists of reports on regression analyses of the educational and occupational prestige attainment of European-American and African-Asian Jews by cohort and immigration status. Additional chapters deal somewhat more briefly with the Arab population and Jewish women. Indeed, of the roughly 180 pages of text, over one-third contain figures or tables. The findings are far too numerous to report here but consistently point to the central importance of educational attainment in the production and reproduction of occupational prestige inequality. Direct effects of the recentness of immigration and of ethnicity, culture, and even gender are remarkably few—leading to the characterization of the Israeli stratification system as being exceptionally “meritocratic.”

In this characterization lies Kraus and Hodge's central puzzle: How

does a system in which educational attainment plays such a central mediating role produce attainment differences across subpopulations that persist and (in many cases) deepen across successive cohorts? In their theoretical development the authors note that initial group advantages are likely to be reproduced by meritocratic systems. They also suggest a number of ways that ethnic and cultural inequalities and the inequalities produced by competition based on educational attainment may be mutually legitimating rather than contradictory. Their interpretation of the meaning of the centrality of educational attainment in the Israeli system is critical in accounting for their empirical results. Rather than accept the conventional interpretation of education as human capital endowment, the authors draw on conflict-school interpretations (particularly those of Margaret Archer and Randall Collins). They argue with great plausibility (albeit without direct evidence) that institutional features of the Israeli educational system (e.g., separate schools for Arabs, strong tracking, and gatekeeping in secondary and higher education) provide the primary mechanism by which Jews of European-American ethnicity have institutionalized their privileged status. From this conclusion about education, Kraus and Hodge are tempted to state, primarily in their final chapter, that reform of the educational system may be highly consequential for achieving greater equality in Israel. I urge caution about such a conclusion. If education were not the mechanism for the reproduction of inequality, it seems likely that others could, and would, be found.

At the theoretical level, *Promises* is not path breaking but contributes to the synthesis of structural-functional and conflict approaches to understanding the importance of race and ethnicity in attainment. There are important issues in the status-attainment tradition that the analysis does not address because the data were collected before new theoretical and empirical developments. Scholars interested in the effects of residential and occupational segregation, firm and industry effects, or class and authority in the workplace will find very little here. This is regrettable because all of these factors may be important in the Israeli case. The inability to deal with them must leave the reader somewhat unconvinced about the central role attributed to education.

In conducting their analyses Kraus and Hodge rely heavily on the method of substituting regression coefficients and means across group-specific regressions to decompose the sources of variance in attainment outcomes. This approach has been widely used in status-attainment research and provides an efficient and telling way of attributing effects to various combinations of causes. However, it does not take full advantage of information on group variances and is probably inferior to multiple-group, LISREL-type decompositions of moments matrices. There is little reason to question the results reported in this regard; I would have preferred a more state-of-the-art approach to the data analysis.

Overall, *Promises in the Promised Land* is a well-crafted volume and a useful contribution to the status-attainment tradition. It does not address some important issues because of data limitations. These limitations

should lead to caution in accepting strong conclusions and implications. Still, there is much of value here for a number of different interests both within and beyond the status-attainment school.

Two Worlds of Judaism: The Israeli and American Experiences. By Charles S. Liebman and Steven M. Cohen. New Haven, Conn.: Yale University Press, 1990. Pp. xi + 202. \$25.00.

M. Herbert Danzger

Lehman College and the Graduate Center, CUNY

"This book," say the authors, "is about changing perceptions of American and Israeli Jews—their perceptions of Judaism and what it means to be a Jew" (p. i). American and Israeli Jews, they argue, are Jewish in different ways. American Judaism has been shaped by the forces of modernity, Israeli Judaism by statehood. Israeli Jews tend to spiritualize and mystify religious categories of thought, American Jews define Judaism in political and ethnic terms. The authors buttress their argument with anecdotal evidence and reference to a number of survey studies of American and Israeli Jews.

They describe Judaism in terms of (1) historical familism, (2) ethnocentrism and anti-Semitism, (3) land, state, and diaspora, (4) liberalism and Judaism, and (5) religious life. The first factor refers to how Jews define their tie to the Jewish people. Central to "historical familism" is the "myth"—by which the authors mean cultural definition—of Jewish history as one of victimization and vulnerability. Israelis, the authors argue, see the connection to Jewish peoplehood in biological terms. Americans have ethicized the conception of family so that it is ideological kinship rather than biological kinship that binds them.

"Ethnocentrism and anti-Semitism" refers to how Jews see their relation to other peoples. American Jews feel that anti-Semitism is alive and needs to be vigorously combated. The authors deny that it is a serious threat and see this activity as mostly a product of Jewish "defense" organizations. They argue that the fact that Jews are successful in a variety of areas and have achieved prominence and political power demonstrates the acceptance of Jews. (Defense organizations point to Jewish experience in Germany, Spain, and elsewhere.) Although American Jews remain concerned about anti-Semitism and profess to have experienced it, their notions of gentile hostility are receding. Israelis have the perception that the state of Israel is the only bulwark in a hostile world and retain a far stronger sense of the hostility of non-Jews.

Land and state are powerfully connected to ethnicity. This is true for Israelis also. The authors demonstrate that it is relatively peripheral for American Jews for whom the concept of exile has lost its meaning.

American Jews are overwhelmingly liberal, and the authors argue their liberalism is central to their conception of Judaism. By defining Judaism

as both centered on values and liberal in content, American Jews universalize their heritage. In contrast, the core elements of liberalism are marginal to the Israelis' conception of Judaism. For Israelis, Judaism is shared ethnicity and religious symbols, not shared values.

Finally, the authors examine religious life, by which they mean religious observance. They find American Judaism characterized by personalism and voluntarism, universalism and moralism. Religion in Israel is characterized by observance of Jewish law and is charged with a sense of triumphalism (except for the moderate Orthodox). In Israel religion is very much a public affair. As a result, in Israel, secular universalism has become more mobilized and assertive than in the United States.

The authors explore the reasons for the divergences of view in the last chapter and conclude, "Not only have two Judaisms failed to emerge, but we do not see the possibility of their emergence in the near future" (p. 174).

This book's focus is commendably broad-gauged. It describes emergent distinctions in Jewish values and consciousness in America and Israel. (The authors do not explore the effect of minority vs. majority political status. This would have required an analysis of the politics of religion in Israel and America.) Yet, the methodology raises some questions. The authors write, "We began with our own impressions . . . [and with] a pretty good idea of what we would find. . . . We did not begin with survey research studies and ask what we could learn from them" (pp. ix, x). The authors then outline their strategies for dealing with the problems this might cause. Nonetheless some problems remain. For example, data on Arab education and mortality are used to infer illiberal Israeli attitudes (p. 115), although even if discrimination were proved, these data could not demonstrate prejudicial *attitudes*. Or again, the concept of familism is derived primarily from respondents' agreement with the statement, "I see the Jewish people as an extension of my family" (p. 10). It is a long leap from this statement to the Judaic "myth" that Jews are the children of Abraham, Isaac, and Jacob. Furthermore, such statements require comparison with other groups' views of ethnic ties. Systematic comparisons with other groups would lay to rest questions about the extent to which the data on ethnicity reflect Jewish values rather than the values of any ethnic group. And a description of the surveys on which the authors draw would have enabled readers to gain some sense of their reliability and could have provided them with the number of cases the percentages represent. On the basis of the data presented, some conclusions, particularly in the early part of the book, are arguable.

Finally, it would have been helpful to know the rationale behind the choice of factors used to describe Judaism. The first two factors (and, in measure, the third) relate to the ethnic qualities of Judaism. The fourth deals with values and the last with rituals. While these are important factors, it would also seem critical to describe beliefs or to explain why they need not be described.

Nevertheless, the major thesis of the book and in particular the chapters on liberalism and on religious life are convincing and illuminate some crucial differences between American and Israeli Judaism. This book breaks new ground in exploring differences between Judaism in the United States and Israel. Those interested in contemporary Judaism and in Israel will want to take its findings into account.

Ethnic Identity and Equality: Varieties of Ethnic Experience in a Canadian City. By Raymond Breton, Wsevolod W. Isajiw, Warren E. Kalbach, and Jeffrey G. Reitz. Toronto: University of Toronto Press, 1990. Pp. viii + 342. \$50.00 (cloth); \$22.50 (paper).

Philip Kasinitz
Williams College

More often than we care to admit, the value of empirical sociology lies less in its answers to the "big questions" that inspire its pursuit than in the nooks and crannies of the social world that it explores along the way. Certainly this is true of this data-packed volume. *Ethnic Identity and Equality* is an analysis of a survey of 2,300 Toronto residents of eight different ethnic backgrounds (Jewish, Ukrainian, German, Italian, Portuguese, Chinese, West Indian, and "majority Canadian") conducted during 1978 and 1979. Despite the authors' tendency to pose questions about the nature of ethnicity in general, few unambiguous answers emerge from the data. As the subtitle implies, ethnicity in Toronto works differently for different groups under different circumstances. Yet in the process of reaching this less than surprising conclusion the authors present a host of fascinating data on patterns of incorporation and variations in the construction and retention of ethnic identity and on the role ethnicity plays in the economic and political lives of Torontonians.

After a short introduction, each of the four authors explores a separate topic in a discrete chapter, complete with its own literature review (which makes the book a bit dense for anyone reading all of it). Wsevolod Isajiw examines a variety of subjective and objective variables to explore the intergenerational retention of ethnicity. In so doing he provides a subtle account of the complex and sometimes unexpected ways that indicators of ethnic identity interact in different groups. The survey data do not serve Raymond Breton's examination of ethnic politics nearly as well. He reports a wide range of variation between the groups in terms of their members' awareness of ethnic organizations and leaders, with Jews, Italians, and Ukrainians being the most mobilized and West Indians the least. He also points to significant differences in political opinions between the groups. Yet, without any discussion of the realities of Toronto's political structure, it is difficult to know what to make of his analysis of respondent's perceptions.

Integrating the survey results with the Canadian census, Warren Kal-

bach examines the relationship between residential segregation and ethnic cohesion. While his analysis supports the assimilationist assumption that residential segregation decreases over time for northern European groups and to a lesser extent for Ukrainians and Italians, he notes that the more recent immigrant groups (Portuguese, Chinese, and West Indians) have actually become more segregated as their communities have grown. Finally Jeffrey Reitz contributes a very fine chapter on the role of ethnicity in the job market. By incorporating post-1970s theoretical developments into his analysis, Reitz provides an account of several distinct patterns of economic organization and of intergroup variations in the effects of labor-market concentration.

Throughout the book, at least two other consistent themes emerge. The first is Jewish exceptionalism. Ethnicity seems to have greater importance in both the personal and professional lives of Toronto Jews than in any other "white" group. Despite high occupational status and economic success, Jews remain highly conscious of discrimination and exhibit strong ethnic cohesion. They are more residentially concentrated than any other group, including the Chinese and West Indians. Whereas, for Germans and Ukrainians, the salience of ethnicity tends to decline as incorporation into Canadian society increases (for Italian and Portuguese Torontonians, the findings are more ambiguous but basically point in the same direction), for Jews, the opposite is true. Paradoxically, a high degree of ethnic cohesion seems to have aided their incorporation into the larger society.

Another central finding is the significance of race. Chinese and West Indian respondents, the "visible minorities" in the authors' terminology, consistently face greater obstacles to social and economic incorporation into Canadian society than do other groups. This may in part be the result of their relatively recent arrival in Canada, but it also seems that, as in the United States, race has effects apart from those of ethnicity.

Interesting as these findings are, *Ethnic Identity and Equality* is limited by its approach. One disappointment is the fact that its authors provide very little information about Toronto itself. Thus, the unique context that frames their findings goes largely unexplored. On the other hand, there is no systematic attempt to compare Toronto with the other cities in Canada or in the United States. Finally, the book leaves one acutely aware of the problems of relying exclusively on onetime survey research. Too often the authors are left with only vague speculations as to what might explain their most interesting results. At the end of his chapter Reitz notes that "theories of ethnic labor markets must also incorporate . . . [a] historical perspective" (p. 194). This is equally true of the other topics covered, and *Ethnic Identity and Equality* would be a much stronger book if he and the other authors had taken this advice to heart.

These limitations notwithstanding, *Ethnic Identity and Equality* is a valuable work. It contains dozens of intriguing findings, which, while sometimes underexplored, make the volume a worthwhile contribution to the ethnicity literature.

Working-Class Americanism: The Politics of Labor in a Textile City, 1914–1960. By Gary Gerstle. New York: Cambridge University Press, 1989. Pp. vii + 356. \$39.50.

David Halle

State University of New York at Stony Brook

This book is a history of two groups of textile workers in Woonsocket, Rhode Island, from 1914 to 1960. The first group is the socially progressive Franco-Belgians, who constituted only 4% of the city's population in 1920. The second group is the French Canadians, who dominated Woonsocket's social and cultural life until 1930. The social order of the French Canadians was conservative, led by a clergy still steeped in Counter-Reformation values. Fundamental to their outlook was the notion of *la survivance*—the perceived need to preserve “traditional” Catholic religion and family values and French-Canadian culture in an English-speaking, Protestant, industrial milieu. This involved militant opposition to labor movements and to other forms of radicalism. Yet in the 1930s the French-Canadian workers combined with the Franco-Belgians to form the Independent Textile Union (ITU), a CIO affiliate, and, as a result, Woonsocket became the center of organized labor in New England.

The heart of Gary Gerstle's study is an analysis of “Americanism,” which he argues was a critical factor in permitting the alliance between the two groups and in camouflaging basic differences between them. Gerstle divides Americanism into four components, three of which the ITU leadership fastened onto and reworked to suit the needs of labor and, especially, to unite the two groups of workers. The first component is nationalism, which revolved around expressed admiration for such American heroes as the Pilgrims, the Founding Fathers, and Abraham Lincoln, as well as their accomplishments—religious freedom, the Republic, and the preservation of the union and the freeing of the slaves. Thus the ITU news regaled its readers with such Lincoln aphorisms as “Labor is prior to, and independent of, capital” and “There is no America without labor” and complaints about the tyranny of employers. The second component of Americanism was progressivism—the belief in the fundamentally rational, plentiful, and ever-improving nature of America and the modern world. This the ITU reworked to stress the fact that the existence of the industrial society, one of America's greatest achievements, was largely due to the workers. The third component was the democratic, focusing on such (often competing) ideals as liberty, rights, freedom, independence, and democracy. The ITU reworked this to focus on the accumulation of power in the hands of large capitalist employers and to exhort workers to vote for the Democratic party and FDR. The fourth component of “Americanism,” as Gerstle defines it, the ITU pointedly ignored. This was the “traditionalist” component

that involved nostalgia for a simpler, supposedly more virtuous past of small-town, white, Protestant, rural America. Clearly this component conflicted in many ways with the progressive strand.

This ideology succeeded, in the sense that the French-Canadian workers put aside *la survivance*—no involvement in American culture or in labor unions—and adopted Americanism and its prolabor, pronunion manifestations. But the French Canadians added anticommunism, parochialism, and religious devotion to their own interpretation of traditionalism. Thus the French-Canadian unionists did not abandon their ethnic community but reconciled their new class and American identities with their traditional ethnic and religious ones. Further, from 1941 to 1946, under pressure from a powerful wartime state machine espousing its own ideology, the working-class Americanism that had focused on making the relation between capital and labor less unequal and more democratic was changed into pluralism, focusing on the notion of equal opportunity for everyone and the elimination of racial, ethnic, and religious prejudice. Now anticommunism and cultural pluralism dominated the discussion of what it meant to be an American. There was a stress on the rights of all, including not just a hatred of racism and a critique of bigotry but also the rights of employers to make profits. The labor-capital conflict was displaced from center stage. The radical socialists had lost control.

Gerstle has used a wide array of sources, including 44 oral-history interviews with key figures in the historical events he analyzes. The study's massive detail does not obscure the overall argument. This is a wonderful book, whose implications for political and social theory are, with the sudden collapse of communism in Eastern Europe, newly relevant.

Unpacking the Fashion Industry: Gender, Racism, and Class in Production. By Annie Phizacklea. New York: Routledge, Chapman & Hall, 1990. Pp. vi + 121. \$52.50 (cloth); \$15.95 (paper).

Sonya O. Rose
Colby College

The author of this compact book analyzes the fashion-wear industry in the United Kingdom, revealing how gender, racism, and class shape its dualistic structure. Annie Phizacklea offers a historical portrait of the industry and compares the contemporary U.K. fashion industry with its counterpart in West Germany. These historical and contemporary comparisons reveal the gendered component of the industry's structure. Regardless of the mode of manufacture or the specific structuring of the industry, it relies on the low-waged labor of women. In agreement with scholars who have suggested that skill is a gendered construct, Phizacklea argues that the industry has always made use of women's supposedly

"natural talents" for using needle and thread (learned as part of growing up female) to reduce the costs of training and to justify the low pay and unskilled or semiskilled status of the jobs of needlewomen.

By giving a brief historical overview of the industry, she shows the continuities as well as the changes in the industry as it responded to shifts in the demand for ready-made women's wear. She shows that the industry had been heavily reliant on subcontracting since the 19th century. She suggests that factory production was never capable of displacing workshop and home-based manufacture because the flexibility of the latter form of manufacture was especially suited to the demands of fashion. Even during the post-World War II years when the industry developed a dualistic structure, both the primary factory-based sector and the outworking sector were reliant on subcontracting.

What is especially interesting about the British fashion-wear industry, is that, in recent years, production in the United Kingdom itself has withstood the competition of "offshore" production. While several large firms have made use of Asian women in Asia for aspects of the production process, the family-based labor of Asian women in the United Kingdom itself has provided the low cost and flexible alternative that competitively produces fashionable clothing for middle-class consumers. She suggests that fashion wear has been less affected by imports than the more highly standardized sectors of clothing production such as that of men's shirts. In comparison, the West German fashion-wear industry has relied on production in South and Southeast Asia. Phizacklea argues that British immigration policy is what differentiates the two countries.

The secondary sector of the British fashion-wear industry has become dominated by small-scale ethnic entrepreneurs who make use of family labor much as Jewish immigrants did in late 19th-century London. The author argues that this ethnic entrepreneurship must be understood as having developed from a combination of Thatcherite policies and racism. In addition, she proposes that racism may be more important than ethnic cultural patterns in shaping the use of family labor, especially female labor in this secondary sector.

Phizacklea presents a sophisticated analysis of economic dualism by showing how it is shaped by racism and sexism in combination. Although the primary sector of the clothing industry does make use of technologically sophisticated and expensive equipment, it still relies on the low-waged labor of women. In addition firms in that sector subcontract to firms in the less stable secondary sector. Thus many of the dynamics that link the primary sector in developed countries with a secondary sector in developing countries are at play *within* the United Kingdom.

Primarily because this is such a brief monograph, it would have been helpful if the author had laid out her argument and her theoretical perspective more clearly than she did in the introductory chapter. However, this does not substantially detract from what otherwise is an interesting and informative book that would be very useful in courses on industrial sociology and the sociology of gender.

Understanding the Gender Gap: An Economic History of American Women. By Claudia Goldin. New York: Oxford University Press, 1990. Pp. xviii + 287. \$29.95.

Joan R. Acker
University of Oregon

Does economic development foster equality between women and men? Claudia Goldin argues that it does, although progress is not steady and reverses have occurred. She bases this claim, for the United States, on an impressive analysis of previously neglected historical data sources and a reanalysis and reassessment of more recent data on women's situations in the paid labor force. The book is based on a series of papers that Goldin has published since 1977 and thus represents the culmination and integration of many years of work in which equality is examined in terms of the emergence of the female labor force, the gender gap in earnings and occupations, the emergence of "wage discrimination," the changing economic role of married women, the problem of why change took so long, and state policy concerning women's work.

Married women's labor-force participation over the past 200 years can be represented as a U-shaped curve, with relatively high participation rates in the 1790s declining with industrialization and then beginning to rise again sometime just after the beginning of the 20th century. While the participation of married women was falling in the 19th century, single women were increasingly entering paid work. However, even at its lowest, the participation of married women was considerably higher than is usually reported. Goldin corrects the 1890 census data for biases that result in underestimates of women's market production, increasing "the participation rate of married women across the entire economy by about 10 percentage points" (p. 44). Black women have always worked for pay in larger proportions than have white women, and they were more adversely affected by the Great Depression than white women. Moreover, married women were either paid workers or full-time housewives: cohort analysis shows that as early as the beginning of this century, married women in the paid labor force had had considerable work experience and that their experience has not increased dramatically even though labor-force participation has soared.

The gender gap in earnings, Goldin argues, narrowed from about 1820 to 1850, during the period of rapid industrialization, and again from 1890 to 1930, with the rise of clerical work. Thus, the stability of the gender wage gap from 1950 to the early 1980s represents a change, not a continuing pattern. Wage discrimination, defined as that part of the wage gap that cannot be attributed to differences in worker characteristics, grew with the growth of clerical work, rising "from at most 20% of the difference in male and female earnings around 1900 in manufacturing to 55% in office work in 1940" (p. 117). Wage discrimination in office work increased as the result of conscious policies to establish sex-segregated

occupational ladders, part of firms' strategies to bond workers to the firm, "elicit appropriate effort by different types of workers" (p. 116), and increase profitability. Because women were less likely than men to aspire to leadership positions and more likely to leave the labor force, sex segregation and the barring of women from higher-wage jobs may have allowed firms to better "use the effort-inducing and ability-revealing mechanisms of the wage structure" (p. 116). Societal beliefs in the appropriateness of sex-based differentiation also bolstered employers' views.

Changes in the economic role of married women have been enormous, and Goldin explores in detail various explanations for these changes, concluding that the effects of underlying determinants, such as increased education, reduced birthrates, and the growth of the clerical sector, were prolonged by the Great Depression, discrimination, and institutional constraints. Marriage bars, rules against hiring married women or rules requiring the firing of single women who married, are one example of institutional barriers that delayed the growth of married-women's employment. Times have changed in the past 10 years or so, with the removal of explicit barriers and some indications of a declining wage gap and decreasing gender segregation. Goldin concludes on the cautiously optimistic note that economic development must be shaped by politics if the result is finally to be gender equality.

Understanding the Gender Gap provides a comprehensive statistical portrait of changes in the working lives of women in the United States. Goldin's creative and careful use of multiple data sources and her discussions of problems with the available statistics are enlightening and should be a starting place for others who want to do research on these issues. Although she relies on conventional human capital and labor-supply-and-demand arguments for explanation, she also turns to customs, norms, and prejudice to understand what economic theory cannot explain. This sociological aspect of the argument is underdeveloped, in spite of Goldin's final reliance on failures of state policy and women's child-rearing responsibilities to explain continuing gender inequality. Also absent is any recognition of the feminist discussion of the complex interconnections of gender ideology and scholarship in the construction of historical accounts. Claudia Goldin has made a significant contribution to increasing clarity on the quantitative evidence, but explaining the gender gap is still an elusive goal.

Informal Marriage, Cohabitation and the Law, 1750-1989. By Stephen Parker. New York: St. Martin's Press, 1990. Pp. vii + 176. \$39.95.

Haya Stier
University of Chicago

What differentiates marriage from other types of intimate relationships is its legal status. Historically, marriage has been defined and redefined

by social institutions through legislation and by individuals through their actual behavior. In *Informal Marriage, Cohabitation and the Law*, Stephen Parker analyzes the main historical changes in family law that took place in England beginning with the mid-18th century. He demonstrates how the dominant social institutions, the state, the church, and the governing classes, used legislation to change the boundaries of marriage to serve their interests.

Formal marriage is an important concept because it has legal implications for the status of both individuals (e.g., inheritance rights) and social groups. Therefore, Parker focuses on the legal construction of marriage (not the social acceptance of one form of heterosexual relationship over the other). He insightfully presents the law as a manifestation of dominant ideologies. As such it is subject to manipulation, on the one hand, by the dominant social groups and, on the other, by individuals who refuse to obey the rules. Thus, the law is presented in two forms: (a) as a means in the hand of the state or the governing classes to control behavior and (b) as an adaptive mechanism that responds to individual practices and needs.

Parker's main argument is that changes in the definition of marriage are a product of complex relationships between social and economic conditions, political forces, and individual strategies. He traces a trend in the definition of marriage from a relatively formless practice at the turn of the 18th century, through high formality during the 19th century and the early years of the 20th century, to a less restricted form in the present, with the current increase in jurisdiction of cohabitation. This trend is associated with changes in the economy and the relative importance of marriage and the family in the transmission of power, wealth, and ideologies.

The driving force of social change, in Parker's view, is the economy. He shows how changes in economic conditions, especially in the mode of production, lead to particular patterns of marriage legislation. Before the Industrial Revolution, a plurality of marriage forms, formal and informal, coexisted. Economic and social changes during the Industrial Revolution generated a need for a tighter control on marriage and reproductive behavior, leading to the emergence of rigid uniform marriage legislation. Later, the bureaucratic state, with its system of vital registration, also demanded a clear definition of marriage.

Although uniformity of marriage practices was a desired behavior, Parker argues that, throughout the history of marriage, private ordering of family relationships coexisted with the legal one, as a product of the continuing negotiation between individuals and social institutions (p. 28). The "cat and mouse" game in which individuals try to fight the law and vice versa, became more salient after Lord Hardwicke's 1753 act that imposed a uniform, inflexible definition of marriage. People comply with the law when it suits their interests: when the formal law limited age at marriage because land was scarce, many young people turned to informal

marriages; when women from propertied classes wanted to maintain control of their own assets, private marriage settlements were made; and when the Poor Law in 1834 made legal marriage a necessity to most urban women, most forms of informal marriage were abandoned.

The increase in women's labor-force participation and economic independence made formal marriages less attractive to women, and, since 1945, cohabitation has become more widespread. Cohabitation, in a sense, poses a threat to the ability of the state to control the reproductive behavior of people. Parker argues that, because marriage has lost its economic base, new ideologies have emerged that focus on the family instead of on marriage and on women's role as mothers instead of as wives. The legislative arena is characterized by a shift from marriage law to family law with special emphasis on the welfare of children. This, according to Parker, set the conditions for the reemergence of plural practices of marriage.

Although the analysis of marriage behavior and the law is not based on a systematic data set and draws in some instances on ad hoc explanations and speculations, Parker's book offers two main contributions. First, by presenting the law as an intervening mechanism in the bargaining process between social institutions and individuals, he provides innovative insight into the legal system's role in society. Second, he contributes to the growing interest in "alternative family arrangements" in modern societies, by revealing the historical roots of cohabitation and the causes for its existence. As opposed to those who view cohabitation as a threat to the traditional family, Parker presents it as a stage in a dynamic process of negotiation between individuals and social institutions. Thus, future patterns of marriage and family will be based on the legal (and practical) outcomes of these negotiations.

Law of Desire: Temporary Marriage in Shi'i Iran. By Shahla Haeri. Syracuse, N.Y.: Syracuse University Press, 1989. Pp. xiii + 256. \$39.95 (Cloth); \$14.95 (paper).

Minoo Moallem
University of California, Berkeley

The Law of Desire is an original, first-hand anthropological study of the institution of temporary marriage (*mut'a*) in Shi'i Muslim religion. According to Shahla Haeri, *mut'a* is an institution in which marriage, sexuality, morality, religious laws, cultural practices, and the relationships between the sexes converge. To explain how this institution of temporary marriage differs, on the one hand, from permanent marriage and, on the other, from modern forms of prostitution, Haeri takes the reader through the legal interpretation of the *mut'a* before going on to

examine the life stories of some women and men involved in this institution.

According to Haeri, while marriage and sexuality are conceived by Shi'i *ulama*, or clergy, as being positive, self-affirming, and concerned with human needs, they nonetheless submit to the natural differences among women and men. With regard to these natural differences, Muslim law establishes social institutions that meet the distinct needs of men and women. However, the institution of marriage, whether temporary or permanent, is categorized as a social contract that obeys a patriarchal set of laws and interpretations that, by acknowledging men's sexuality from an insider's point of view, imposes an outsider's perspective on women, their nature, their needs, and their wants (p. 26). Gender differentiation in the contract of temporary or permanent marriage symbolically and conceptually determines distinct roles for men and women. So on the surface of Shi'i doctrine, while the objective of permanent marriage (*Nikah*) is procreation, and women are referred to as objects to be bought (*tamlík*), the temporary marriage (*Sigheh*) is intended for sexual enjoyment and as a result women are referred to as objects to be leased (*ijarikh*) (pp. 30–31).

Haeri's central concern in the first part of the book is with the law as it is imposed but not necessarily with the law as it is interpreted or practiced. This distinction leads Haeri to look at other facets of social reality in the second and third parts of the book. The three parts follow Haeri's theoretical concerns about the difference between the law as imposed and the law as negotiated and reinterpreted in different social circumstances either by the *ulama* or by social agents. By explaining and discussing the legal structures of permanent and temporary marriage, as well as the diversity of interpretations given either by Shi'i *ulama* or by individuals who use the institution, Haeri challenges the static view of Muslim law as an unchanging set of institutional parameters.

By revealing the ambiguities in this form of marriage, the multiplicity of its meanings, alternative ways of manipulating and negotiating the institution, Haeri illuminates the triangular relations of social values, institutions, and individuals. Haeri provides an exemplary empirical model for a multidimensional approach wherein the complexity of social reality is not reduced to either social structures or social agents.

Haeri is to be commended for choosing such a difficult subject of inquiry, given the fact that most people are reluctant to discuss their experiences about this kind of temporary marriage. Methodologically, her choosing to interview both men and women involved in such marriages is very important. The responses themselves reveal the differentiated places occupied by men and women in the sex/gender system and demonstrate the dominant position of men and the dominated position of women. The contractual nature of the institution of marriage does not deny the fact that this contract is between individuals who are members of two categorically, hierarchically differentiated social groups. Although Haeri underlines the importance of an analysis of social reality that includes the

institution of temporary marriage, her theoretical framework does not help us to understand the persistence of such an institution and its compatibility with the requirements of a modern society. Haeri does not examine the conflicts and related issues that enable different groups of men to appropriate women's labor power and also women's bodies—the source of this labor—for their profit.

After the Islamic regime came to power in 1979 in Iran, the Shi'i *ulama* interpreted temporary marriage as a legitimate and morally valuable institution and proclaimed the superiority of this institution to the Western-style "free" male-female relationships (p. 210). Thus, the institution of temporary marriage and its redefinitions have come to occupy an important place in the regulation of male-female relationships in Shi'i doctrine and furthermore constitute one important element in any study of the rise of Muslim fundamentalist worldviews. This issue, although mentioned by Haeri, is not fully elaborated in this book, and I look forward to future contributions by Haeri that analyze the Muslim fundamentalist's challenge to modern prescriptions of family and gender roles and their attempts at redefining male-female relationships and the consequent implications for women in these societies.

Endless Crusade: Women Social Scientists and Progressive Reform. By Ellen Fitzpatrick. New York: Oxford University Press, 1990. Pp. xv + 271. \$35.00.

Mary Jo Deegan
University of Nebraska at Lincoln

When the University of Chicago opened in 1892 it was at the center of a revolution in higher education for women. For almost a quarter of a century it trained some of the most intelligent and capable female social scientists in the world. Ellen Fitzpatrick examines the largely public lives and the effect on policy of four women who had received their doctoral training at the University of Chicago by 1905: Edith Abbott, Ph.D., 1905; Sophonisba P. Breckinridge, Ph.D., 1901, J.D., 1904; Katharine Bement Davis, Ph.D., 1899; and Frances A. Kellor, graduate student in sociology, 1898–1902. The women's early lives are introduced, followed by a description of Chicago in the early 1890s. The interdisciplinary strengths of these early days is a constant theme in this section and throughout the book. The young professional women were advised to enter applied work, "the thing for which you are most fitted." The next chapters focus primarily on their adult careers, first on Davis's career in criminology, then on Kellor's work in a variety of applied areas that Fitzpatrick coordinates under the phrase "if sex could be eliminated," and then on Abbott's and Breckinridge's academic and social policy work in "their own" school of civics and philanthropy. A brief epilogue

summarizes the women's lives and careers from 1920 until 1957, the year Abbott died.

The book will be of some interest to those who study public policy and the Progressive Era from a sociological perspective and for those who want to study the gendered nature of interdisciplinary training in social sciences at the University of Chicago. But, as the dust jacket suggests, this book will appeal primarily to historians of education, women, and reform. The major contributions to these historical perspectives are new information on Kellor's early background, information on Davis's relations with the Rockefeller Foundation, and a collective study of the treatment of the four women. Since all the women were closely involved in sociology throughout their lives (Abbott, Breckinridge, and Kellor were members of the American Sociological Society and were published in the *American Journal of Sociology*, for example, and Davis frequently claimed the title of "sociologist"), it is disappointing from the point of view of sociologists that these eminent women were not linked more directly to sociological work, ideas, tradition, and history. But this was not Fitzpatrick's intent, and so sociologists, who choose to read Fitzpatrick's work for sociology, must decide how much of other disciplines, politics, and history they wish to read to sift out bits of sociological relevance. In short, the direct sociological importance of this book is rather slim.

The reader should also be aware of a curiously conservative interpretation that underlies the book. Although these women were pioneers in women's education, sociology, social work, social policy, politics, and social movement organizations, Fitzpatrick rarely examines these women as leaders of women per se. Fitzpatrick's four subjects were embedded in a world of "women-identified" ideas and relationships that merit scholarly analysis. The words "feminism," "patriarchy," or "gender" are not found in the index, reflecting the absence of a focus on structural inequality based on sexism. In addition, Fitzpatrick often judges these brilliant intellectuals and activists rather harshly. For example, discussing studies conducted by Abbott and Breckinridge, Fitzpatrick says that "much of the impetus for the housing investigation derived from concerns that were essentially conservative" (p. 178). Fitzpatrick asserts that the women "measured what they found in Chicago's slums by middle-class values" (p. 178), as if wanting heat, light, and ventilation are concerns of only the bourgeoisie.

Since some scholars claim that the University of Chicago had trained half the sociologists in the world by 1930, it behooves us to know more about the women who helped build that foundation. Fitzpatrick's book helps document this division of labor, but it remains for sociologists to integrate this information into sociology's annals, history of ideas, and networks.

Les philosophes de la République. By Jean-Louis Fabiani. Paris: Les Éditions de Minuit, 1988. Pp. 178. Fr 89.

Naissance des "intellectuels," 1880-1900. By Christophe Charle. Paris: Les Éditions de Minuit, 1990. Pp. 272. Fr 149.

Randall Collins
University of California, Riverside

French philosophy was not notably creative in the later 19th century and the early decades of the 20th century. The only figure of international fame was Bergson, and he had no personal disciples and little direct influence among French philosophers. But sociology, psychology, and anthropology were being created within the ranks of the philosophers. Creative literature ranged from naturalist novelists such as Émile Zola to their modernist opponents such as Stéphane Mallarmé and budding stars such as the young Marcel Proust. Relations among academic scholarship, literature, and politics were being reorganized in a manner that looked forward to the existentialists of the 1930s and 1940s and to the upheavals of the 1960s and 1970s. The foundations were being laid for the spectacular French intellectual life of the 20th century.

Jean-Louis Fabiani and Christophe Charle both draw on Pierre Bourdieu's sociological perspective to bring this formative period into focus. Fabiani's account shows philosophy's becoming an academic profession after the Republic was reestablished in 1871, Catholic control of education was overthrown in 1880-82, and a mass public school system was built. Yet academic philosophy remained static, oriented toward the classics. Fabiani indicates this intellectual conservatism derived not from the surrounding society but from the organization of philosophical careers. Those who escaped this intellectual stance were outside of the normal career paths: the positivists, followers of Comte or other defenders of a scientific worldview, were either nonacademics or held positions outside of philosophy (Renan was a professor of Hebrew at the Collège de France; Taine taught at the Ecole des Beaux Arts); the "personalist" neo-Kantians such as Renouvier, were similarly isolated from academic teaching of philosophy.

An academic philosopher was expected to cover the whole field in an eclectic manner. Typically there was only one chair of philosophy per university. Philosophy was also taught in the lycées, the elite secondary schools, where a survey of philosophical classics was taught in the last year of instruction. Most philosophers were trained at the elite school of education, the Ecole Normale Supérieure (ENS) in Paris, and had to spend a number of years teaching in the lycées before they might receive positions in higher education. Bergson spent 16 years teaching at lycées, both in the provinces and in Paris, before finally becoming elected to the Collège de France; thus he never taught any university students, for in his later career he merely lectured to the general public from an honorific

position. We see the same career pattern in the 1930s with Jean-Paul Sartre, who went from the ENS to teaching at a provincial lycée and then to a Paris lycée and finally moved into the Parisian world of literature, theatre, and political journalism. In such cases, we see philosophical creativity taking the form of an appeal to extraacademic audiences and escaping from the academic organization itself.

The more typical route of the trained philosopher was to work one's way up the academic hierarchy itself. From lycée teacher one might become a school inspector in the government bureaucracy, an administrator of centralized examinations, or a member of juries granting higher degrees. Success in such careers not only meant adhering to a conservative intellectual canon but tended to confine one's scholarly activity to producing manuals or translations and editions of the classics; it was acceptable to publish little or nothing.

This school-philosophy exercised an attraction because of its self-image as the crown of the disciplines, the subject that brought together the wisdom of everything else that pupils learned. This legitimation could be maintained as long as philosophy was the required subject at the end of the secondary curriculum. Given that the lycée was largely humanistic, stressing classical languages, history, and literature, philosophy allied itself with a conservative position against the natural sciences, which had been excluded during the period of Catholic control of education. But notable advances were being made in medicine, chemistry, and other sciences, and, by the turn of the century, there was pressure to reform the curriculum and to displace the humanities and philosophy from their privileged positions in the sequence of requirements. Philosophers drew together in defense of their discipline; a majority of them either joined the spiritualist camp, upholding subjective and ideal values against science or else adopted a position of criticism against positive claims to knowledge. Bergson's creativity was the most notable effort in this movement.

The science/antiscience struggle also took place within the ranks of philosophers themselves. In the 1870s and 1880s, the most ambitious students of philosophy, men like Théodule Ribot, Alfred Binet, Pierre Janet, Émile Durkheim, and Lucien Lévy-Bruhl cast in their lot with the burgeoning natural sciences. They regarded their conventional philosophy teachers as an uninspiring lot and sought to carve out new scientific disciplines on philosophical grounds. Their ambitiousness, Fabiani argues, can be accounted for by their family backgrounds; the creators of the social sciences typically came from provincial families with high cultural capital—teachers, doctors, rabbis; the spiritualist philosophers were more likely to come from Paris families with high economic capital and connections in the business or the literary worlds.

By the 1890s, the academic world is reorganizing. Philosophy is splitting. On one side there is an academic sector that attempts to uphold the prestige of the classics, in a nontechnical and historical manner. Here there would be no opening for a militancy of the logicians and the anti-

metaphysicians such as what was to take place in England and in Vienna; there would be no equivalent to logical positivism or ordinary-language philosophy in France. In another direction, the impulse to innovate on the scientific side had given rise to specialized social sciences, the anti-metaphysical disciplines of sociology, psychology, and anthropology; although they dealt with some traditional philosophical topics such as epistemology and mind, they treated these empirically and avoided the technical apparatus of the English and Viennese logicians. A third wing was made up of the antipositivists, moving beyond their spiritualist roots into a militant antimodernism. This was a wing of academic philosophy that broke from the respectability of official careers and cast its lot with the literary intellectuals. Here we see the emergence of perhaps the most distinctive and influential trait of French intellectual life in the 20th century: the deprofessionalization of intellectual careers, the trading in of the prestige of the 19th-century professor for a life tied to the more exciting, and episodic, identity of the literary journalist.

As we see in Charle's book, the identity of the "intellectual" thus constituted was ambivalent along two axes. One axis is academic versus nonacademic. The second axis is political. Although, in the shadow of the 1960s, we tend to take it for granted that "intellectual" means an ideologist of the Left, the history of the period from about 1820 to 1930 shows that intellectuals in politics were likely to be on either side, including that of the extreme Right. The Dreyfus affair, which broke out in 1898 and whose repercussions continued into the early 1900s, mobilized intellectual militancy in both directions.

The Dreyfusards (liberal/Left critics of the government and the army) were drawn in part from the academic world: above all from philosophy and history, to a lesser degree from the languages and the natural sciences; whereas anti-Dreyfusard (conservative nationalists, often pro-Catholic and anti-Semitic) were drawn from law, political administration, medicine, and economics. This is a split between the more autonomous, academically oriented faculties and those tied to the establishment through practical careers. Among literary, nonacademic intellectuals, the Left/Right split ran between the young and unpublished on the Dreyfusard side and the older, better-known writers who could afford to live in a bourgeois style among the anti-Dreyfusards. But anti-Dreyfusards also included a literary avant-garde, a journalist proletariat who depended for a living on popular newspapers and on ephemeral small magazines. The Left/Right split was in part a matter of whether intellectuals are autonomous and oriented toward their own community (either because they have academic success or because they are literary aspirants cut off in bohemia) or are, on the contrary, attached to the dominant order (again in two ways, as successful professionals or writers or as a proletariat eking out a living under the demands of the popular press).

The intellectual world at this time, Charle argues, had become split over the issue of elitism. Both academic and literary worlds are stratified

in terms of fame and recognition; yet both worlds have as a part of their central identity the emphasis on culture as being above merely material or social advantages; both extol the realm of creativity and "merit." Each of these realms has its internal conflicts, an implicit class struggle among aspirants, failures, modest achievers, and the stars who reap most of the honor. In France at the turn of the century, academics looked down on journalists and popular authors as crassly commercial; in return, writers who made their living in the commercial market charged the academics with elitism and a lack of social values. Both sides saw the other as unprincipled and unjustly privileged.

Behind this lay a real structural transformation. The small group of "men of letters," "savants," and "poets" that constituted the creative and learned fields early in the 19th century had given way to a large, competitive, and differentiated market for cultural capital after 1880. On one side, the market for popular books and newspapers now offered lavish incomes for a few, a scramble for many; on the other side, university academics and secondary teachers had become more numerous, more encapsulated, and less honored. The intellectual professions whose members had turned to romanticizing a conservative past—the doctors, lawyers, teachers at provincial schools, aspirant novelists—were being realistic when they saw the danger in the overawarding of diplomas that was reducing the elite status of their occupations. An attack on the egalitarian ideology of the liberals was a reflection of their interests.

Here we see a parallel to Bourdieu's analysis, in *Homo Academicus* (Cambridge: Polity, 1988), of the upheaval of the 1960s. In both cases, expansion of the unprivileged sector of academics, spilling over into feeding the Parisian literary/journalistic "proletariat," created multiple lines of resentment. In both cases, sectors of academics and of the more successful media figures occupied ambivalent positions, constituting an establishment and antiestablishment simultaneously. As Fabiani points out, recent "postmodernist" arguments move within the same structural conflicts that had emerged a century earlier. Given the likelihood of continual ups and downs in the market for intellectual goods, it appears that such struggles are a long-term feature of French intellectual life.

The Game Planners: Transforming Canada's Sport System. By Donald Macintosh and David Whitson. Montreal: McGill-Queen's University Press, 1990. Pp. viii + 176. \$24.95.

James H. Frey
University of Nevada at Las Vegas

The Game Planners is a study of a policy transformation that has taken place within six national sport organizations (NSOs) in Canada. The transformation involves an ideological shift from an emphasis on mass participation in sport to a concentration of energy and resources on

"high-performance" or elite sport. Donald Macintosh and David Whitsion implemented an intensive case-study methodology that included in-depth interviews with NSO and government officials, document analysis, observation, and survey questionnaires. This research revealed not only an ideological shift but a structural change as well. The NSOs' autonomy has been compromised by the Canadian government through the federal agency Sport Canada; the physical education profession turned its attention from a participation orientation to one that emphasized the scientific analysis of performance, and the sports community turned to emergent professional occupational groups (e.g., sport medicine, sport management) to replace the volunteer who traditionally guided Canada's sports program. Thus, *The Game Planners* is a study of concomitant processes of organizational change and professionalization.

These trends came as the result of the bureaucratization and consequent rationalization of the Canadian government's sport system. The structural change that increased the government's intrusion into NSO policy-making practices was motivated by a desire for increased national visibility and an improved performance level in international sport. As a result, regional interests were subverted by national policy, the organizational structure of sport governance was centralized, and resources were redirected to improving performance levels. In order to enhance performance, the sport community had to be more knowledgeable about what it takes to be successful in sport. This increased complexity required expertise or the utilization of professionals rather than of untrained volunteers familiar with sport science and sport management.

The Game Planners is an excellent study of the emergence of "aspiring" professions within the sport community. This study helps us understand under what conditions an occupation changes from the peripheral status of service work to the core status of a profession. These factors include the increased complexity of the task, the ability to translate new forms of knowledge (i.e., sport science) into occupational power, the ability to justify the need for full-time attention to goal achievement, and the establishment of a credentialing process. While the professionalization of sport occupations has been successful, the ability of these professionals to influence policy has been minimized by the bureaucratic control the government has imposed on the NSOs and affiliated sport organizations. Thus, professional autonomy and ideology have been subordinated to state policy. These professionals are also in conflict with remnants of the volunteer administration who retain some control of sport organizations. In addition, the professionals were engaged in steering Canada's sport system to elite performance while talking at the same time about "democratizing" the sport system in order to appeal to the volunteer component. Clearly, this was an exercise in public relations to co-opt those interested in mass sport participation. The government, supported by the new professionals, was moving the sport system to a singular emphasis on elite, high-performance sport. A rational, efficient, expertise-based planning apparatus was required to reach this goal.

The stress on high-performance sport had its costs, however. The major casualty of this emphasis was the derogation of the government's goals of equality. Ethnic, regional, class, and gender equality is not found in the newly formed bureaucratic sport system since such equality seemed to be an obstacle to reaching high-performance goals. Few women are in administration, Francophones are underrepresented at all levels, the wealthy urban centers prevail over the poorer rural jurisdictions, and upper-class males are more prominent, particularly as athletes.

The Game Planners is an excellent account of what can happen in a merger of professional occupational development and organizational change. The sport occupations' desire for professional status was matched with the Canadian government's emphasis on high performance. The developing field of sport science provided the opportunity for a successful marriage. The authors are not happy with this transformation. Elite sports and the interests of capital, such as nation building and international prestige, have pushed aside mass participation and equity as acceptable policies. According to the authors, sport needs to be reclaimed from the sport professionals by the grass-roots organizations, which are in a better position to maintain democratic premises in policy formation.

The Game Planners is an intriguing study in the relation of the rationalization of an activity that is ordinarily and naively considered to be above such processes (i.e., sport). Most contemporary institutions have undergone a similar transformation; sport is no different. Sociologists of sport and those who study complex organizations could use *The Game Planners* as a resource in their analyses of how sport and society are interrelated.

Charismatic Capitalism: Direct Selling Organizations in America. By Nicole Woolsey Biggart. Chicago: University of Chicago Press, 1989. Pp. xii + 223. \$24.95 (cloth); \$12.95 (paper).

Charles W. Smith
Queens College, CUNY

Charismatic Capitalism: Direct Selling Organizations in America joins a growing list of socioeconomic studies that underscore the value of applying sociological understanding to activities that have often been considered purely economic in nature. As the subtitle of this book indicates, the particular economic practices that are the subject of this study are direct-selling organizations (DSOs). More specifically, Biggart focuses on network DSOs such as Amway, Tupperware, and Mary Kay Cosmetics.

Biggart's basic thesis is that DSOs cannot be explained or understood purely in neoclassical economic or rational organizational terms. Rather, it is necessary to apply more general sociological notions and to place

DSOs within their proper cultural and structural contexts. This Biggart does by presenting a broad history of DSOs, including a more detailed analysis of the effect of the 1930s' Depression on the growth of DSOs. part of this analysis, she shows how differences in supply and demand of labor and goods influence the relative emphasis given to production and selling in modern capitalism.

Biggart argues that the dominant American work ethic, specifically the pervasive American belief in the virtue of entrepreneurialism, has played a central role in the growth of DSOs. She similarly finds it useful to view the growth of DSOs in terms of historical limitations placed on female participation in the work force; DSOs provided an opportunity for part-time employment that allowed participants to fulfill family obligations. Biggart further argues that DSOs, by using established family and friendship networks, charismatic leadership, and status enhancements, are able to work around and with factors that are at odds with more usual bureaucratic organizations. Her discussion of the "family" language of DSOs is particularly fascinating. Salespersons in the Mary Kay Cosmetics DSO are referred to as the "sisterhood"; organizational systems are commonly referred to as families or "genealogies." There are equally engrossing descriptions of organizational meetings and award dinners as well as some of the particular management techniques employed by some of the charismatic leaders who direct these organizations.

As one who shares Biggart's views of the value of socioeconomic research, I have little doubt that Biggart's study supports her basic thesis. The book has the added value of providing rich and extensive details about DSOs; her description of network DSOs is particularly fascinating. Such networks constitute a most interesting and unique social life form, both structurally and ideologically. Her suggestive discussion of comparative cross-cultural successes and failures of DSOs is equally compelling. Here again Biggart indicates how ideological and structural factors, such as the extent of welfare benefits and worker organization, have both supported and impeded the growth of DSOs in Europe and Asia.

My major criticism of the book is that it often seems to adopt what could be called an upbeat DSO management position. These organizations may be the salvation that they are presented to be for some. Biggart herself, however, presents enough facts regarding turnover, low salary scales, and exploitative management practices to dispute the generally positive stance toward DSOs that pervades her analysis. To a large extent I think this generally positive view is because Biggart's interview sample draws primarily on those who have been relatively successful in direct sales, and she relies highly on management publications and records.

I was also disappointed by the limited use of related works by an ever-growing number of sociologists studying a range of economic markets. I, like Biggart, am a great admirer of Max Weber, but I believe Biggart's account would have profited from being tied a little less to Weber and more to contemporary related works. Here I have in mind the extensive ethnographic work by such authors as Robert Prus and

others associated with the *Marketplace Exchange* newsletter as well as the work of many associated with the Society for the Advancement of Socio-Economics. To be fair to Biggart, it should be noted that many of these authors have only recently emerged. There is the added fact that Biggart comes to her subject from an organizational background, whereas much of the uncited literature has its roots in symbolic interactionism and political economy.

To a large extent my criticism reflects my desire for more. I would have liked to hear more from those who have left the various DSOs. I would also have appreciated hearing more about the ways individuals have forced DSOs to change over the years. Since most DSO salespersons work part-time, I would also have been interested in getting a better handle on the other types of employment that they might pursue. While these may be considered critical comments, they reveal the interest generated by the book. Socioeconomics in general and the sociology of markets in particular have reemerged in recent years as important areas of sociological concern. Biggart's book underscores the value of pursuing this trend.

Culture Control and Commitment: A Study of Work Organization and Work Attitudes in the United States and Japan. By James R. Lincoln and Arne L. Kalleberg. Cambridge: Cambridge University Press, 1990. Pp. xii + 291. \$44.50.

Carmi Schooler

National Institute of Mental Health

Culture Control and Commitment deals with an extremely timely subject—the determinants of work attitudes in the United States and Japan. In contrast to many books on this subject it uses a state-of-the-art data base for sampling and for gathering individual and organizational data. Factories and their employees in a selected set of industries in two comparable regions (Indianapolis and Atsugi) were sampled. Of the selected factories, about 45% participated (52 in the United States, 46 in Japan) and allowed researchers to gather data about plant structure, technologies, management practices, and so forth. About 70% of the sampled employees (4,567 in the United States, 3,735 in Japan) filled out a questionnaire on their work attitudes, job situations, and backgrounds. These data were collected with a sophisticated awareness of the difficulties that beset cross-cultural studies. The research and analytic designs evidence an almost total command of the literature on organizational research in general and on Japan in particular.

These resources are used to test the theoretically and practically important hypothesis "that the dedication and commitment of Japanese workers derive from Japan's leading edge status as an adopter and imple-

menter of a new and highly successful technology of organization and control" (p. 28). Examining the organizational differences between Japanese and U.S. plants in their study, James R. Lincoln and Arne L. Kalleberg observe: "What we find striking are the parallels between the portrait of the Japanese organization and structures and practices which other streams of organizational theory and research identify with commitment-maximizing corporatist forms of organizational control" (p. 180).

When they go on to look at the degree to which organizational features affect employees' organizational commitment and job satisfaction, they find that "whether in Japan or the US, 'Japanese-style' decision-making . . . and welfare services . . . enhance commitment and . . . satisfaction" (p. 247). Lincoln and Kalleberg conclude: "As in any large-scale empirical study . . . our findings are complex and lend themselves to few pat interpretations. Nevertheless, they have yielded a portrait of the Japanese workforce as more committed to the company. . . . Moreover, our findings of Japan-US differences in the decision-making structures and welfare programs of firms and in the responses of employees to these structures provide strong evidence that at least part of any commitment advantage enjoyed by the Japanese manufacturing economy derives from wider implementation of certain elements of welfare corporatist control" (p. 254).

Although they are not strong enough to lead to a basic rejection of Lincoln and Kalleberg's empirical findings, I have reservations about these conclusions. Among my methodological concerns is that LISREL analyses are used to do things that cannot be done with the data (e.g., the appropriate instrumentation is insufficient to permit the modeling of the reciprocal effects of organizational commitment and job satisfaction). On the other hand, LISREL is not used to develop multiple-item indices of variables causally prior to organizational commitment or job satisfaction, although error in causally prior measures leads to greater distortions in causal estimates than does error in causally later ones. I am also concerned with the subjectivity of the job-complexity scale. It certainly would not have hurt to subject it to confirmatory factor analysis along with the closeness of supervision and autonomy scales.

As someone who has spent decades demonstrating that people's occupational conditions (e.g., substantive complexity) affect their psychological functioning and values, I also have trouble in accepting Lincoln and Kalleberg's "overarching hypothesis . . . that facets of the work role such as complexity, supervision, or autonomy have relatively little to do with the shaping of values which to a large degree are formed outside the workplace" (p. 127). Accepting such an hypothesis may simplify causal analyses, but it leaves me wondering about the degree to which reported relationships reflect hidden reciprocal effects of occupational conditions on values.

My final concern is brought about by the number of quotations of the "expert" views of various *Wall Street Journal* reporters in the concluding

section. Somehow, having carried out what is certainly the most extensive and, for all of my complaints, the most methodologically sophisticated comparative study of the effects of work organization in Japan and the United States, the authors should have been able to relate their conclusions more closely to the body of empirical research on how cultural, institutional, economic, and psychological levels of phenomena interact in Japan. Perhaps this is too much to ask. Even without doing so, Lincoln and Kalleberg have added much to what we know about culture, control, and commitment in Japanese and American workplaces.

Gay Priests. Edited by James G. Wolf. New York: Harper & Row, 1989. Pp. xxiii + 216. \$17.95.

Bob Blauner

University of California, Berkeley

In 1984 James Wolf, then a graduate student at the University of Chicago, was asked by a group of gay priests to conduct a survey on sexuality and the priesthood. When his first attempt at a random sample of all U.S. priests produced only a 31% response rate, he decided to use a snowball sample instead. In a long opening chapter, Wolf both summarizes the data from the 101 self-identified gay priests who completed his questionnaire and provides a concise summary of the Catholic church's position on homosexuality.

The heart of the book is the essays that follow, in which four priests reflect on the sociological, theological, and personal aspects of their experiences in coming to terms with the contradictions inherent in their conflicting statuses. The consensus from both these essays and the survey is that the vast majority of gay priests have come to accept their homosexuality. Because of the unusual circumstances and the depth of their vision, these coming-out stories have a special power and poignancy. And, although most feel that the ideal of a celibate priesthood needs revision, for straight as well as gay Catholics, some gay priests apparently have chosen to adhere to it, whereas others believe in acting on their needs for love and sexual expression. Even if these men do not experience guilt and self-rejection, their conflicts are still considerable. Celibacy seems to take a special toll on gay priests. They experience the loneliness of not being able to consummate relationships, the loneliness of having to hide an essential part of their being from all but a few intimates, and a more general feeling of being "abandoned by God," a statement with which 43% of the sample concur (p. 22). They deal with this loneliness through therapy, through counseling with spiritual advisers (usually other gay priests), and through clandestine support groups.

Yet they remain committed to the church and the priesthood and gain great satisfaction from their ministries. They view gayness as a special

gift, one that has given them "feminine" qualities of compassion, softness, and integrity that help them, especially in counseling the down-trodden. This is the thesis of Thompson in his essay, "A Christian Spirituality," and of Edwards in "Invisible Gifts." (Both names are pseudonyms.) Edwards provides profound insights on the origins of homosexuality and the inner struggle for self-acceptance. Thompson is quite lucid in his discussion of love, intimacy, and the connections between homophobia and the suppressed desire of men for warmth and intimacy with other men.

For someone like myself for whom formal religion and devout belief have always been enigmas, these essays begin to make a little clearer the meaning and appeal of Christianity. There is philosophy as well as sociology in this volume, for example, as in this quote, "God gives each of us the opportunity to choose the spirit by which we are going to live. We can choose the spirit of arrogance, the spirit of competition, the spirit of sex, the spirit of power, the spirit of fear" (p. 124). Thompson tries to live by the "spirit of integrity." He goes on to tell how the spirit of God led him to gay bars and adult bookstores, a statement that will probably strike some readers as blasphemous. But Thompson explains that "in these dark inner sanctums," he was compelled to face his own fear and his real self. For many of these priests, the gay culture, as represented in the bar scene, provided an important haven and sense of community during periods of isolation and played a critical role in the coming-out process, after which they "no longer find the need to frequent these places" (p. 125).

I hope that this book will be read widely, since it is a work that can do much to counter the homophobia of the general public. *Gay Priests* will also be valuable for both students and scholars in the area of sexuality as well as that of religion. And it will find a sizable audience in the population of gay priests themselves, if their numbers are as large as all the authors believe. (The proportion of all priests whose sexual orientation is more gay than straight, according to the average estimates of the 101 priests questioned, is 48.5% of ordained priests and 55.1% of seminarians.)

As for the officials of the church, we can assume that the Catholic establishment has always known that a significant proportion of its priesthood has been homosexual. But until recently, when a number of priests have become stricken with AIDS, it had been possible to keep this knowledge hidden. The publication of this important book can only hasten the day when the church hierarchy is forced to confront the contradiction between its official position on sexual love—inside and outside the priesthood—and the realities of present-day human behavior.

Disorders of Desire: Sex and Gender in Modern American Sexology.
By Janice M. Irvine. Philadelphia: Temple University Press, 1990. Pp.
xii + 345. \$34.95.

Arlene J. Stein
University of California, Berkeley

If the profession of sexology had its way, writes Janice Irvine, it would become our primary arbiter of culturally normative sexual behavior and gender relations. But after more than half a century spent advising people on how to improve their sex lives, the control "sexual science" exerts over our health and habits remains partial and tentative. This is true even though the terrain of sexuality appears ideally situated for the consolidation of expert power: Americans are highly anxious and ambivalent about sex, sexual norms change quickly and often inexplicably, and sex is a subject about which most individuals have only fragmentary knowledge. These favorable conditions, however, have not ensured the profession's success, and most Americans continue to view sexology as pseudoscience and sex researchers with derision, as encapsulated in the comments of a former president of the Society for Scientific Study of Sex: "My goal is to make people take our field seriously, so that, when we say we are sexual researchers, people will no longer laugh."

Disorders of Desire is a comprehensive, nuanced investigation into why people still laugh. The author, a sociologist also trained in sexology, combines an outsider's perspective with an insider's knowledge of the field to explore the professionalization of modern American sexology and its underlying ideologies, the role of sexology in the historical construction of sexual disease and a biomedically negotiated consolidation, and the field's relationship to shifting political, cultural, economic, and demographic variables. She shares Michel Foucault's interest in tracing the genealogy of our cultural discourses on sex and gender and the assumptions of power hidden within them, but while Foucault paints in broad brush strokes, traversing centuries and cultures, Irvine's study is much more manageable and, as a result, more convincing.

The author finds a consistent tension between "sexual politics" and "sexual science." Sexology presents itself as an interrogation into "essential" human truths external to sexual politics and social forces, oblivious to the fact that those social forces have shaped the profession and its object of inquiry at every step of the way. Intent on expanding the market for their services, sexologists have sought to consolidate their status as experts who can ameliorate sexual problems while failing to see that factors internal to the profession cannot guarantee successful professionalization. "Relationships to the public, to dominant social institutions, and to cultural developments are crucial. A profession is most successful if it can reflect the dominant values of a society while simultaneously addressing public concerns" (p. 76). But it is the very nature of sexual behavior and norms, its being always in flux, that makes the consider-

ation of public concerns absolutely necessary and, at the same time, potentially subversive of the field of sexology. Such a recognition would require the profession of sexology to radically revise its constitutive vision of itself and reevaluate the sexual essentialism on which it is based. Paradoxically, it is a contradiction that drives sexologists to become ever more vigilant in their commitment to science.

The core of the book is an analysis of the ways in which sexology attempts to structure and negotiate the sex/gender system in order to demystify what Irvine calls our accepted "sexual belief systems." Despite growing diversity in the ranks of sexologists, particularly since the 1960s, the author finds that the normative values operating within the profession remain virtually constant. The male sexual experience is universalized as the model for healthy human functioning, the heterosexual dyad is held up as the ideal, and sexuality is itself, not surprisingly, seen as an "object" fit for biomedical investigation. While sexologists' desire to strike a blow against antisex attitudes is at least partly progressive, says Irvine, their downplaying of the social construction of sexuality and its intersection with gender and their false universalization of a specific set of historical and social relations render them, in the end, a conservative force. This dynamic is played out in two major projects of scientific sexology—the provision of sex therapy and research in gender-related issues.

In a chapter entitled "Boys Will Be Girls: Contemporary Research on Gender," one of the more compelling parts of the book, Irvine describes how some sexologists, beginning in the 1960s, moved more into research on the origins and development of masculine and feminine behavior in an attempt to explain "gender failures." They saw gender identity, gender role, and sexual preference as naturally linked, a normative construction that sociologist Barbara Ponse has called the "principle of consistency" (*Identities in the Lesbian World* [Westport, Conn.: Greenwood, 1978]). While Kinsey, Masters and Johnson, and other researchers at times urged a loosening of cultural stereotypes of masculinity and femininity on the grounds that "diversity" was natural, their belief that homosexuality and gender "dysphoria" were biologically rooted "conditions" paved the way for sexologists to develop and implement programs for the surgical reassignment of sex. But such programs, says Irvine, only serve to reify gender and show how futile is the effort to impose order on the inherently disorderly universe of gender and sexual behavior.

This critique of the normative biases of sex research, and of the static biological model of sexuality implicit in it, is not in itself particularly new, having been made by feminist and gay activists and social scientists since the late 1960s. Where Irvine does break new ground is in showing how it is precisely by this omission and distortion that the sexological enterprise dooms itself to marginality—people laugh at sexology, in large part, because they know it does not really work. This is something that Michel Foucault, who believed that the texts of medical experts exert a

near-total grip on their objects of study, did not see. For this reason, Irvine's more nuanced investigation is all the more sociologically compelling.

Women for Hire: Prostitution and Sexuality in France after 1850. By Alain Corbin. Translated by Alan Sheridan. Cambridge, Mass.: Harvard University Press, 1990. Pp. xviii + 478.

Kathleen Barry
Pennsylvania State University

Prostitution, because it has been typically considered a sexually driven cultural universal, has been marginalized as a subject for scholarly, historical study. Even the new social history of sexuality, although encouraged by Foucault's study of the subject, essentializes sexuality, treating it as being libidinally driven by desire, an approach that continues to ascribe prostitution to inevitability and therefore to ahistorical universalism.

Alain Corbin's history of prostitution in France since 1850 is a major, if problematic, contribution to historical research that succeeds in placing venality, or sex for money, in a social history that intersects with and is shaped by changing economic and political conditions. The subject of this work is the brothel and its rise and downfall through official government regulation in late 19th-century France. And the author succeeds in his goal of discerning coherence between (male) sexual need and the structural, behavioral, discursive, and political aspects of sexuality. Regulated or state-supervised prostitution as it emerged in discourse in France in the 1850s and was enacted into law in the post-Commune 1870s began from an intention to repress or control all forms of extramarital sexuality. Its proponents (falsely) believed that putting prostitution into state-regulated brothels would take it off the streets, thus providing in a limited way for men's extramarital sexual needs while trying to contain them. Because prostitution was regulated, police records were kept and Corbin is able to support his research with statistical as well as qualitative detail. He clearly demonstrates how the rise in prostitution after 1880 was associated with conspicuous consumption and produced a large variety in kinds of brothels as well as an increase in the diversity of sexual practices for sale. All of this was accompanied by an aggravation in pimping and trafficking in women.

Corbin is able to trace the failure of regulationism to its shift from attempting to contain extramarital sexuality to trying to provide for a changing male consumer demand characterized by an increased taste for adultery and seduction. What is evident is that regulation and therefore the state contributed to the expansion instead of the control of prostitution. Corbin contextualizes the social changes in the discourses (anarchist, socialist, feminist) that emerged in response to regulation. In doing so, he provides an interesting and curious history of the abolitionist move-

ment that arose to free women from regulation, but not as a human-rights response to prostitution as often happens today.

Corbin succeeds in retrieving prostitution from myth and social presumption by placing it in verifiable reality. But the major weakness of this work is that, in his portrayal of prostitution as an institution shaped by changing male sexual desire, Corbin never offers a criticism of the sexist practice of establishing an industry of sex to satisfy that desire. He has therefore been able to avoid the feminist critique of sexuality that rejects the automatic assumption that men have the right to subordinate women and discriminate against them because of alleged sexual desires or needs or drives. The author should not have ventured into the contemporary period, which he says he does reluctantly, because when he speaks of contemporary prostitution as "the free exercise of venal sex" (p. 367) he reduces his important study to sexual liberalism, so often criticized in feminist research, and makes it one more justification for prostitution. While he historicizes both the rise and failure of regulation and examines it through the evidence of shifting male sexual desire, he dissociates this historical movement from the very force that moves history: power relations, which Foucault, in his history of sexuality, made as central.

While limited in terms of a critical history of the power relations that shape venality, this study holds significant contemporary relevance beyond that identified by the author. The history of regulation and the rise of abolition movements are extremely important to us today. If we do not pay particular attention to the failures of regulation so well developed by Corbin, we will find ourselves repeating history, particularly with the contemporary concern over AIDS and the tendency to look to the regulated brothel to control its transmission by prostitutes. But regulation has achieved none of its aims, including the control of contagious diseases. It is yet another excuse for expanding prostitution. Therefore this book is important for its implications of contemporary public policy on these issues.

Fraternity Gang Rape: Sex, Brotherhood and Privilege on Campus. By Peggy Reeves Sanday. New York: New York University Press, 1990. Pp. xxv + 201. \$19.95.

Michael S. Kimmel

State University of New York at Stony Brook

Gang rape has become something of an epidemic on college campuses. Referred to euphemistically as "pulling train" or a "gang bang," gang rape is a brutal sexual victimization, most often by a group of fraternity brothers or members of an athletic team. The victim, often rendered unconscious by spiked drinks or drugs at a fraternity party, is unable to resist. Afterward, the men rationalize the event in terms of a sexual encounter that brought them together as brothers. The woman, often

riddled with shame and fear, believes that she brought her rape on herself.

When a gang rape occurred at the University of Pennsylvania where anthropologist Peggy Reeves Sanday teaches, she decided to decipher the meaning of gang rape to its perpetrators as well as to its victims. Sanday, the author of pioneering studies on rape as a cultural system—her cross-cultural surveys developed a scale that determined the likelihood of a culture being “rape prone”—underscored the ways in which rape was a cultural vehicle that initiated men into masculine roles and circumscribed aggression of young males toward one another by redirecting it toward women. In particular, Sanday found that, “whenever men build and give allegiance to a mystical, enduring, all-male social group, the disparagement of women is, invariably, an important ingredient of the mystical bond, and sexual aggression the means by which the bond is renewed” (pp. 19–20). Rape keeps all men privileged, regardless of individual behavior; rape terrorizes all women, including those who are not raped.

In *Fraternity Gang Rape*, Sanday analyzes the different discourses employed by various groups after the rape. These groups include the campus judiciary committee, the fraternity and sorority systems, the campus and local newspapers, and the students themselves. Fraternity members rationalized male sexual aggression by defining it as “a necessary, indeed natural, ingredient of male sexual expression and heterosexual masculine identity” (p. 73). Women are the agents of control; rape, therefore, represents a woman’s failure to exercise effective control. The campus judiciary committees and campus and local newspapers expressed horror at the violation of individual rights, while the fraternities and sororities either condoned it or distanced themselves from the offending fraternity’s excessive actions. Many students, including some women, blamed the victim, who, they believed, should have known the risks at the fraternity party. Only feminists saw the systematic nature of male sexual aggression.

And, frankly, Sanday is furious about it. This book is an angry book, a book that rages against the mechanisms of male domination through sexual terrorism. She drops whatever veneer of social scientific objectivity she had possessed in her earlier cross-cultural studies. Her prose smolders in a social-science based, journalistic reportage. She may write of discourses, but, as far as Sanday is concerned, all discourses other than that of the victim are really lies. Although she adopts a postmodernist language of deconstruction, Sanday’s aim is more to tear the smug veneer of privilege off the entire organization of gender relations.

Some readers may find this rhetorical style unsettling; I found it powerfully moving and analytically provocative. Sanday embeds gang rape in a constellation of sexual aggression and male bonding, exploring the links between them. We are most likely to find gang rape in male groups in which bonds of brotherhood are exalted to a mystical level; in such an institution—fraternities, athletic teams—“party sex is the glue that binds the brothers to the fraternity body” (p. 37). The erotically charged homo-

social (and homosexual) theme is not lost on Sanday, who argues that, through gang rape, "by sharing the same sexual object, the brothers are having sex with each other as well" (p. 110).

Sanday's intention, though, leads to some analytic excesses of her own. She argues that the fraternity brothers' "concern with sexual potency and social success in the male heterosexual role masks a deep fear, hatred, and fascination with homosexuality," unable to imagine that some forms of homosociality, even intense, homosocial bonding, are not, by definition, sexual.

In later chapters, Sanday extends the argument to include sustained attacks on fraternities in general as props of male privilege and of initiation rituals in particular as moments of the reproduction of male domination. "As long as exclusive male clubs exist in a society that privileges men as a social category," she writes, "we must recognize that collective sexual aggression provides a ready stage on which some men represent their social privilege and introduce adolescent boys to their future place in the status hierarchy" (p. 20).

Obviously, this is powerful stuff. If the college or university at which *AJS* readers teach has a fraternity and sorority system, this book will be useful in understanding the way those organizations not only construct the gender relations between women and men on campus but also provide a map of male domination that members can take with them for the rest of their lives.

A General Theory of Crime. By Michael R. Gottfredson and Travis Hirschi. Stanford, Calif.: Stanford University Press, 1990. Pp. xvi + 297. \$39.50 (cloth); \$12.95 (paper).

Charles R. Tittle
Washington State University

Michael R. Gottfredson and Travis Hirschi have produced many provocative papers, with themes that include an interpretation of the age/crime relationship, a distinction between crime and criminality, a theory of white-collar crime, critiques of longitudinal methodology, and challenges to the influential criminal-career paradigm. Here those themes are synthesized within a general theory of crime that contends that crime is a product of weak self-control combined with criminal opportunity.

Their argument is not as simple as the statement above, however, and the intellectual process leading to the theory is pregnant with important observations about human nature, criminological thought, and empirical issues. The authors define crime independently of law as "acts of force or fraud undertaken in pursuit of self-interest" (p. 15). Crime, including white-collar crime and "organized" crime, is characterized as unplanned, unspecialized, and of little or no real benefit to offenders—basically impulsive behavior by "losers" seeking quick gratification. As

such, crime reflects a behavioral pattern that includes things like having accidents, smoking, and defaulting on debts. Gottfredson and Hirschi conclude that such personal irresponsibility, of which crime is a part, is due to poor self-control, which, in turn, stems mainly from ineffective socialization in which parents have failed to monitor and correct misbehavior.

Since all criminals are motivated by self-interest, the cause of crime is said to be the failure of internal controls. However, even for an individual with weak self-control, criminal acts are not inevitable nor is his or her rate of offending constant throughout life. Rather, the probability of criminal behavior is partly a function of opportunity—easy availability of objects of force or fraud in situations that imply low costs to the potential offender—and of age. Hence, there are three components to crime: weak self-control, opportunity, and an inherent, inexplicable tendency for it to increase up to the late teenage years of individuals and then to decline steadily.

This book presents powerful arguments, turns many neat phrases, shows that much criminology is confused about its purpose or blind to its inconsistencies, demonstrates the profound implications of its argument for criminology, generally, and for the ways it is studied, specifically, and will almost convince a reader that black is white. Certainly the book will generate research and will provoke debate about the theory and its related arguments. Controversy is guaranteed because the authors take extreme positions, among which is the denial of any relevance of sociological variables, including those in Hirschi's earlier theory of social control. The authors' position here is that all social factors that might motivate criminal behavior are irrelevant because no special motive is required and asserts that all social factors that have been presumed to restrain criminal behavior are themselves indicators of self-control. For instance, people who appear to be prevented from committing acts of fraud or force by social bonds are actually refraining from crime because of the self-control that originally influenced them to form constraining social relationships.

There is much of value in this work: it represents a rare attempt at general theory; it recognizes the futility of glorifying minutiae while neglecting overarching patterns; it challenges the current enthusiasm for longitudinal work, using a theoretical and an empirical rationale; and it sets forth some good ideas, based on a better concept of crime. Indeed, this is one of the most important books in criminology in the past 20 years. However, its unnecessary extremity will alienate many; it has already forced its authors into intellectual contortions.

For example, although a distinction between criminality (the propensity) and crime (the event) was presumably developed to deal with the age/crime problem, the authors continue to insist that there is no explanation for the usual decline in offending after the peak years nor any need for one. Crime declines with age simply because it does; therefore, theories are only required to account for stable differences between offenders

and nonoffenders. Yet, it seems sensible to apply the general theory itself to argue that crime declines with adulthood because criminal opportunity declines, particularly since the concept of opportunity incorporates an idea of cost, one element of which could be social control. But having stated two extreme views, an earlier one about age and crime and the new one presented in the book that says that no sociological variable can make a difference, the authors apparently feel compelled to deny explanation, even if it means undermining the full import of their own theory.

Similarly, claiming that all crime is alike forces Gottfredson and Hirschi to depict most white-collar crime as irrational and disorganized, despite much evidence that many corporate entities, governmental officials, and high-status individuals use fraud and force in carefully planned ways to enrich themselves and preserve their positions. Characterizing all crime the same way seems to reflect the authors' peculiar, confrontational approach to criminology rather than empirical or logical necessity. Their theory, with a little modification, could easily accommodate the idea that strong, as well as weak, self-control can lead to force or fraud in the service of self-interest, with actual probabilities and types of crime depending on interactions between degree of self-control and kinds of opportunity.

Despite such flaws or, perhaps, idiosyncracies, this is an excellent book. Nobody interested in crime and deviance can afford to ignore it.

Chinese Subculture and Criminality: Non-traditional Crime Groups in America. By Ko-lin Chin. Westport, Conn.: Greenwood Press, 1990. Pp. xviii + 189. \$39.95.

Bernard N. Meltzer
Central Michigan University

Are Triads (originally, Chinese secret societies), tongs (self-help associations formed by Chinese immigrants), and street gangs part of an international Chinese Mafia? Will Chinese crime groups in the United States supplant Italian crime groups and become the major organized-crime problem in this country? Are the emergence of Triads, tongs, and gangs and the dramatic increase in Asian heroin in the United States causally related? This book, apparently based on a doctoral dissertation, addresses these questions.

Employing ethnographic interviews, participant observation, official reports and documents, and newspapers and magazines, Ko-lin Chin presents the early and recent history of the Triads, tongs, and street gangs, a description of the operations of these groups in the United States, and an analysis of the structure and activities of the gangs in particular. He introduces his study by pointing out that a major factor in the growth of Chinese crime in this country has been the dramatic increase in Chi-

nese immigration since 1965. This increase was stimulated, of course, by the liberalized Immigration and Naturalization Act of that year. Of at least equal importance in the generation of Chinese criminal gangs have been the basic norms and values of the Triad societies, which include the "thirty-six strategies," prescribing various criminal acts.

Originally for the most part political organizations that began in 17th-century China, the Triads became diverted (particularly in Hong Kong) to criminal activities. The magnitude of these activities is suggested by two facts: the number of Triad members in Hong Kong is estimated at 160,000 (about 3% of the population) and Triad operations extend to the Netherlands and Australia, as well as to the United States. Chin tells us that the already established tongs and street gangs are manifestations of Triad subculture, and, unsurprisingly, that the more than 30 tongs found in this country are located almost exclusively in Chinatowns. Using New York's Chinatown as an extended illustration, Chin tries to show that Chinatowns tend to be disorganized communities. They are culturally diverse (with residents who come from China, Hong Kong, Taiwan, Vietnam, and other Southeast Asia countries), lacking in structural integration (with few resources to sponsor community improvements), and politically fragmented (divided between support of the Kuomintang and the Chinese Communists).

In discussing the development of Chinese gang delinquency, Chin adduces the usual array of "causative factors": school problems, family problems, and lack of employment opportunities. To these he adds role models provided by tong elders. He then presents "a causal model of Chinese gang delinquency" that emphasizes Wolfgang and Ferracuti's subculture-of-violence views and the thesis of social or community disorganization propounded by Thrasher and Shaw and McKay.

A chapter on "Criminal Patterns of Chinese Gangs" details the form and extent of each pattern. Protection of gambling houses operated by tong members is common; but so is "protection" sold to between 80% and 90% of Asian businesses. Robbery, while common, tends to be a free-lance activity rather than gang directed. Operating houses of prostitution, drug trafficking, and gang violence are other frequent activities. The gangs are especially numerous in San Francisco, Los Angeles, Monterey Park, and New York City, but are also found in Oakland, Chicago, Boston, Dallas, Houston, Arlington (Virginia), Washington, and other cities. The largest of the gangs, in California, has between 600 and 700 members, of whom about 200 are hard-core. On the other hand, the largest number of gangs are located in New York City.

Chin presents data on demographic characteristics of gang members, structural and dynamic features of the gangs, and gang norms and values. He accounts for the persistence of the gangs on the basis of the following characteristics: (1) unlike black and Hispanic gangs, Chinese gangs are closely related (through their linkage with the tongs) to their communities' social and economic life; (2) also unlike other ethnic gangs,

Chinese gangs flourish in rapidly growing and economically robust communities; and (3) through their being embedded in the legendary Triad subculture, Chinese gangs can claim a certain legitimacy in their communities. In addition, these gangs persist because the residents of Chinatowns lack confidence in the police and the courts, prefer mediation, and fear reprisals.

Chin's concluding chapter makes it clear that Triad societies, tongs, and street gangs, while culturally integrated, are not structurally related, engaging in only sporadic cooperation in certain legal and illegal activities. Especially valuable in this chapter is the differentiation between Italian and Chinese crime groups, vital to Chin's argument that the existence of a Chinese Mafia is a myth. He maintains that, while Italian crime groups have penetrated the mainstream of American society, the Chinese gangs are still largely confined to their ethnic communities. Furthermore, while members of the Cosa Nostra and its Commission are all criminals, the tongs and their Chinese Consolidated Benevolent Association—if not the street gangs themselves—include both lawbreakers and law-abiding members.

The chief value of Chin's book lies in its provision of useful historical, descriptive, and analytical information on a relatively under-studied topic. Although the bulk of his material is, perhaps necessarily, more descriptive than analytic, he does bring us up-to-date on an increasingly prominent part of the crime problem here and elsewhere. It is interesting, however, that his causal analysis of Chinese gang delinquency draws primarily on works published between 1927 and 1967 (Thrasher, Shaw and McKay, Cloward and Ohlin, and Wolfgang and Ferracuti)—an intriguing commentary on the low level of cumulation in crime and delinquency theory.

The Search for Structure: A Report on American Youth Today. By Francis A. J. Ianni. New York: Free Press, 1989. Pp. xi + 336.

Sanford M. Dornbusch
Stanford University

The Search for Structure is an unusual book. Francis Ianni has devoted more than a decade to studies of youth in numerous communities and settings. In part, this is a report of what he and his collaborators found in their thousands of interviews. Simultaneously, the author reflects on our national experience and the results of other studies. There is little attempt to separate the products of empirical research from the general perspectives that now inform Ianni's thinking. The audience is not other researchers but the interested policymaker and citizen.

There is not a single quantitative report in this volume. Since much of the discussion contrasts different communities and ethnic groups, the

reader is unable to judge how much the conclusions are buttressed by data. Unexceptionable statements and controversial conclusions are stated with the same low-key air of simple reporting. The result is a book that reads smoothly for a wider audience.

Yet the book merits attention by scholarly readers. The major contribution of Ianni's research is in the details, for he does a good job of showing how each community shapes adolescent development through its families, peers, schools, social agencies, workplaces, and system of justice. The overarching theoretical perspective, despite some bows to Erikson, argues for the necessity of interpenetration among institutional sectors.

Since much of the book describes differences among communities in the ways that institutions affect each other, it is understandable that Ianni exhibits a preference for social remedies that link different institutions. Unfortunately, this leads to a less critical view of social programs, such as mentorship, that bring adults and youths together across institutional boundaries. In the earlier chapters, Ianni often concludes that the social programs that he has observed do not work, while toward the end of the volume Ianni lists, with considerable enthusiasm, projects that have yet to be evaluated.

Ianni describes how the environments in which youths develop shape their images of themselves, their current situations, and their futures. (I am a little surprised by the lack of explicit attention to the way gender affects his results.) He does an excellent job of uncovering the diversity that is lost when we use aggregated statistics for whole communities. There is no single youth culture, there is differentiation within each ethnic community, and differing perceptions of future adulthood direct the course of adolescent choices and outcomes.

The conclusion, and theme, of the book is that community institutions need to work together to produce a shared normative structure. Lacking that level of consensus and coordination, too many youths do not have a societally approved source of guidance and self-enhancement. Whether or not Ianni is right, the reader will gain an increased awareness of the complexity of American social structures and their link to adolescent problems.

Ethnic Humor around the World: A Comparative Analysis. By Christie Davies. Bloomington: Indiana University Press, 1990. Pp. x+416. \$39.95.

Howard J. Ehrlich

National Institute Against Prejudice and Violence

Consider the following set of generalizations: "Sausages are comic while bread is dignified" (p. 297); "Ethnic jokes in general are funnier than

similar nonethnic jokes" (p. 320). These are just two of the deadly serious and bizarre generalizations that pepper this ostensibly scholarly survey of ethnic humor.

This is no slight work. The book reflects years of a prodigious accumulation of stories spanning time and place (with an emphasis on the jokes of English-speaking societies). But it is redundant and poorly organized. The author gives major attention to "stupid jokes," which he claims to be the major category of ethnic jokes. Jokes about others' being "dirty," "canny," and "cowardly" and jokes relating to the characteristic foods associated with a group predominate in his discussion. Most of the contemporary, insulting, and often genuinely tasteless intergroup jokes now circulating are not represented in this collection. It is strangely genteel; many groups currently targeted by jokes are virtually absent. There are few anti-Asian jokes, no JAP jokes, and no WASP jokes. (What does a WASP do when his car breaks down? Fixes it.) The author also misses the sexism that is explicit in many ethnic jokes.

Christie Davies reiterates his criteria for identifying an ethnic joke in various places in his text. In his concluding remarks he cites approvingly the very stringent proposal that, "if the joke is truly ethnic, the removal of the evoked ethnic script renders it incomprehensible" (p. 321). The problem is that the book is in fact loaded with what I call "zipper jokes." These are jokes in which the identity of the ethnic group is essentially irrelevant to the humor and in which any group can be zipped in to suit the bigoted purposes of the storyteller. (How many ——— does it take to pave a driveway? About a dozen if you smooth them out.) Davies would argue that different groups can only be zipped in—that is, the joke can only be preserved—if the different groups share the same stereotypical characteristic. I am afraid, however, that his approach to group stereotyping is very different from mine. Furthermore, I think that that difference is the basis of my strong negative response to his treatment of ethnic humor.

First, Davies frequently obscures the difference between in-group humor and intergroup humor. This is critical because they serve different functions. I say this as a sociologist, but Davies approaches these jokes more as a folklorist. His analysis, frequently antifunctionalist, focuses (although inconsistently) on the jokes as funny stories: "Jokes are ambiguous comic utterances that have a life of their own" (p. 130).

For Davies, ethnic jokes are not seen as part of the norms of prejudice but as "unimportant and impotent," especially when compared with "overtly hostile ideology." These jokes, he asserts, "are not themselves part of the ideology" (p. 126). For me, the telling of ethnic jokes is a way to preserve the stereotypical assignments of a society in a manner that often entraps the listener, while sometimes masking the intent of the storyteller. Intergroup jokes are acts of prejudice even when the joke teller is unaware of the social or interpersonal effect of the joke.

The book offers a solid bibliography and is not without its thought-

provoking moments, but surely it is fair to expect a book about ethnic humor to be filled with funny stories. At the very least, you can demand that a book on humor be engaging. This book is neither; it is full of unsupported generalizations and pretentious categorizing. Regrettably, one of its more comic pieces is the author's typology of comic dirt, the eminent vacuity of which brings it to a level of sociological parody that, until now, has been occupied only by Daniel Bell's "The Parameters of Social Movement, a Formal Paradigm" (in Dwight MacDonald's *Parodies* [New York: Random House, 1960]). Bell's piece, however, was deliberately written as a parody.

AJS

American Journal of Sociology

Volume 96 Bimonthly July 1990–May 1991

WILLIAM L. PARISH, Editor

WAYNE BAKER, **JULIE E. BRINES**, and **NADER SOHRABI**, Associate Editors
WENDY GRISWOLD, **DANIEL BRESLAU**, and **JOLEEN KIRSCHENMAN**,
Book Review Editors

STEPHEN J. ELLINGSON, **JASON B. JIMERSON**, **SUNHWA LEE**, **ZAI LIANG**, and **MICHAEL J. REYNOLDS**, Associate Book Review Editors

SUSAN ALLAN, Managing Editor

JANE MATHER, Editorial Assistant

Consulting Editors **ELIJAH ANDERSON** • **RONALD AMINZADE** • **RICHARD T CAMPBELL** • **DANIEL B. CORNFIELD** • **PAUL DIMAGGIO** • **MARY L. FENNEL** • **GARY GEREFFI** • **DAVID F. GREENBERG** • **ROBERT ALUN JONES** • **BARRY MARKOVSKY** • **ROSS L. MATSUEDA** • **RUTH MILKMAN** • **S. PHILIP MORGAN** • **TROND PETERSEN** • **JONATHAN RIEDER** • **ROBERT J. SAMPSON** • **AAGE B. SØRENSEN** • **JOHN D. STEPHENS** • **ANDREW G. WALDER** • **PAMELA BARNHOUSE WALTERS** • **LAWRENCE WU** • **DAVID ZARET**

International Consulting Editors **RAYMOND BOUDON** (France) • **PIERRE BOURDIEU** (France) • **TOM COLBJØRNSSEN** (Norway) • **GUDMUND HERNES** (Norway) • **YONG-HAK KIM** (Korea) • **JOHN MYLES** (Canada) • **NORIKA O. TSUYA** (Japan) • **BRYAN S. TURNER** (England)

Editorial Board **C. ARNOLD ANDERSON** • **GARY S. BECKER** • **CHARLES E. BIDWELL** • **DONALD J. BOGUE** • **MARY C. BRINTON** • **TERRY NICHOLS CLARK** • **JAMES S. COLEMAN** • **JOHN L. COMAROFF** • **GEORGE STEINMETZ** • **PHILIP M. HAUSER** • **EVELYN KITAGAWA** • **NANCY LANDALE** • **EDWARD O. LAUMANN** • **DONALD N. LEVINE** • **DOUGLAS S. MASSEY** • **JOHN F. PADGETT** • **EDWARD SHILS** • **FRED L. STRODTBECK** • **GERALD D. SUTTLES** • **MARTA TIENDA** • **WILLIAM J. WILSON**

THE UNIVERSITY OF CHICAGO PRESS
CHICAGO, ILLINOIS

© 1990, 1991, by The University of Chicago
All rights reserved

Published July, September, November 1990
January, March, May 1991

CHICAGO, ILLINOIS, U.S.A

PUBLISHED BY THE UNIVERSITY OF CHICAGO PRESS

ACKNOWLEDGMENTS TO REFEREES

The editors are indebted to their many colleagues across the country who assist the editors and the editorial boards in the assessment of manuscripts. The work of these referees cannot be overestimated. It is a continuous service to the profession. Following is a list of the people who read at least one manuscript in 1990. We take this opportunity at the end of volume 96 to thank them.

MARK ABRAHAMSON	GENE BURNS	KAI T. ERIKSON
ALAN AGRESTI	ROBERT BURSİK	PETER B. EVANS
RICHARD D. ALBA	PAUL BURSTEIN	REYNOLDS FARLEY
ROBERT R. ALFORD	CRAIG J. CALHOUN	JOE R. FEAGIN
EDWIN AMENTA	JAMES G. CARRIER	DIANE H. FELMLEE
RONALD M. ANDERSEN	XIANG-MING CHEN	ROBERTO M.
BENEDICT ANDERSON	DANIEL CHIROT	FERNANDEZ
KEN ANDERSON	AARON V. CICOUREL	MYRA MARX FERRE
ODIN W. ANDERSON	CANDACE CLARK	GARY A. FINE
DOUGLAS L. ANDERTON	DAN CLAWSON	ROGER K. FINKE
MARGARET ARCHER	STEVEN E. CLAYMAN	WILLIAM D. FINLAY
JORGE ARDITI	WALLACE CLEMENT	ROBERT FIORENTINE
S. A. ARJOMAND	KEN CMIEL	NEIL D. FLIGSTEIN
GIOVANNI ARRIGHI	SAMUEL R. COHN	MARY FRANK FOX
JEAN BACON	STEPHEN COLE	RENÉE C. FOX
MARY JO BANE	JAMES J. COLLINS	ELIOT FREIDSON
JAMES N. BARON	RANDALL COLLINS	NOAH E. FRIEDKIN
FRANK D. BEAN	LEWIS A. COSER	DEBRA FRIEDMAN
BERNARD BECK	CARL COUCH	DAVID PATRICK FRISBY
JOSEPH BERGER	DIANA CRANE	RICHARD B. FRITZ
DANIEL BERTAUX	LAWRENCE CREMIN	MARY FULBROOK
DENISE D. BIELBY	KATHLEEN S.	GEORGE GALSTER
WILLIAM T. BIELBY	CRITTENDON	ADAM GAMORAN
PETER BIRKELAND	ROBERT D.	WILLIAM A. GAMSON
PETER M. BLAU	CRUTCHFIELD	HERBERT J. GANS
HANS-PETER	MIHALY	GILBERT GEIS
BLOSSFELD	CSIKSZENTMIHALYI	ERNEST GELLNER
RAE LESSER BLUMBERG	BETH OSBORNE	ANTHONY GIDDENS
LAWRENCE D. BOBO	DAPONTE	NORVAL D. GLENN
DEIRDRE BODEN	DEBORAH D.	THOMAS B. GOLD
PHILLIP F. BONACICH	DAVIS-FRIEDMANN	JACK A. GOLDSTONE
ALAN BOOTH	NORMAN K. DENZIN	JOHN GOLDTHORPE
VOLKER BORNSCHIER	THOMAS M. DIETZ	STEPHEN L. GORDON
CHARLES L. BOSK	THOMAS A. DIPRETE	MICHAEL
TERRY E. BOSWELL	RICHARD B. DOBSON	GOTTFREDSON
PIERRE BOURDIEU	ROBERT DREEBEN	MARK GOULD
WILLIAM J. BOWERS	SEYMOUR DRESCHER	WALTER R. GOVE
KEVIN D. BREAUŁT	THOMAS DURKIN	MARK S. GRANOVETTER
WILLIAM P. BRIDGES	LAUREN B. EDELMAN	LIAH GREENFELD
JACK W. BRITTAIN	MITCHELL L. EGGERS	KIRSTEN A. GRONBJERG
KEVIN BROWN	JOSEPH W. ELDER	DAVID B. GRUSKY
PHIL BROWN	SCOTT R. ELIASON	AVERY M. GUEST
LARRY BUMPASS	REBECCA JEAN EMIGH	JOSEPH GUSFIELD

American Journal of Sociology

- | | | |
|----------------------|---------------------|----------------------|
| DAVID S. HACHEN, JR. | FRED L. KNISS | ERIC MONKKONEN |
| JOHN L. HAGAN | DAVID H. KNOKE | JAMES MONTGOMERY |
| MAUREEN T. HALLINAN | CLAIRE H. KOHRMAN | DAVID MORGAN |
| LINGXIN HAO | DAVID A. KOWALEWSKI | CHARLES MOSKOS |
| AMOS H. HAWLEY | HANS KRIESE | FRANK MOTT |
| MICHAEL HECHTER | PARAMESWARA | JOSEPH T. MULLAN |
| DOUGLAS D. | KRISHNAN | TETSUO NAJITA |
| HECKATHORN | RICHARD W. | SUNGHEE NAM |
| KAREN A. HEGTVEDT | LACHMANN | KATHRYN NECKERMAN |
| SAMUEL HEILMAN | DAVID LAITIN | VICTOR NEE |
| CAROL A. HEIMER | KENNETH C. LAND | ROBERT NELSON |
| DAVID HERLIHY | NANCY S. LANDALE | FRANCOIS NIELSEN |
| GARY HERRIGEL | BART LANDRY | CHARLES NOBLE |
| SCOTT HERRIOTT | SCOTT M. LASH | GUY OAKES |
| WOLF HEYDEBRAND | EDWARD J. LAWLER | ANTHONY R. |
| BARBARA HEYNS | CHE-FU LEE | OBERSCHALL |
| ALEXANDER M. HICKS | VALERIE LEE | JOHN OGBU |
| ERIC HIRSCH | ROBIN L. LEIDNER | DENIS O'HEARN |
| CHARLES HIRSCHMAN | ERIC M. LEIFER | PHILIP G. OLSON |
| LEONARD J. HOCHBERG | CHARLES LEMERT | SUSAN M. OLZAK |
| DENNIS P. HOGAN | ROBERT C. LIEBMAN | ANN S. ORLOFF |
| BURKART HOLZNER | DONALD W. LIGHT | ANTHONY M. ORUM |
| JAMES S. HOUSE | IVAN LIGHT | FRED C. PAMPEL, JR. |
| SHARON K. | NAN LIN | ROBERT NASH PARKER |
| HOUSEKNECHT | JAMES R. LINCOLN | BERNICE A. |
| MICHAEL HOUT | MARC LINDER | PESCOSOLIDO |
| ALEXANDRA HRYCAK | EUGENE LITWAK | TROND PETERSEN |
| JOAN HUBER | J. SCOTT LONG | RICHARD A. PETERSON |
| JAY HUGHES | IAN LUSTICK | RUTH D. PETERSON |
| ALBERT HUNTER | JOHN MACALOON | JEFFREY PFEFFER |
| ELLEN IMMERGUT | MICHAEL MACY | DAVID P. PHILLIPS |
| RONALD INDEN | ROBERT D. MARE | JOSEPH H. PLECK |
| LARRY ISAAC | MARGARET MARINI | WHITNEY POPE |
| JERRY JACOBS | CAROLE MARKS | ALEJANDRO PORTES |
| MARTIN JAY | PETER V. MARSDEN | MORRIS POSTONE |
| CHRISTOPHER JENCKS | ROSS MATSUEDA | BRIAN POWELL |
| J. CRAIG JENKINS | SUSAN MAYER | WALTER W. POWELL |
| ROBERT ALUN JONES | DOUGLAS MAYNARD | JILL S. QUADAGNO |
| ARNE L. KALLEBERG | MARY JO MAYNES | ADRIAN RAFTERY |
| DENISE B. KANDEL | ALLAN MAZUR | CHARLES C. RAGIN |
| MICHAEL KATZ | DOUGLAS J. MCADAM | FRANCISCO O. RAMIREZ |
| THEODORE D. KEMPER | JOHN MCCARTHY | JEFFREY G. REITZ |
| ALAN C. KERCKHOFF | DAVID MCDOWALL | JOHN G. RICHARDSON |
| RONALD C. KESSLER | SARA S. MCLANAHAN | CECILIA L. RIDGEWAY |
| EUN MEE KIM | DAVID MECHANIC | MARTIN RIESEBRODT |
| PAUL W. KINGSTON | JOHN W. MEYER | LEE N. ROBINS |
| JOLEEN KIRSCHENMAN | KAREN A. MILLER | JAMES E. ROSENBAUM |
| EDGAR V. KISER | CARL MILOFSKY | RACHEL A. ROSENFELD |
| HERBERT KITSCHOLT | BETH MINTZ | CATHERINE E. ROSS |
| JOHN KITSUSE | JOHN MIROWSKY | GUETHER ROSS |
| ROBERT A. KLEIDMAN | HARVEY L. MOLOTCH | WILLIAM G. ROY |

Acknowledgments

RICHARD RUBINSON
DIETRICH
RUESCHEMEYER
STEVE RYTINA
ROBERT SAMPSON
JOACHIM SAVELBERG
LAWRENCE A. SCAFF
NORA CATE SCHAEFFER
THOMAS J. SCHEFF
EMANUEL A.
SCHEGLOFF
KIM LANE SCHEPPELE
ALLAN SCHNAIBERG
ROBERT SCHOEN
CARMi SCHOOLER
MICHAEL SCHUDSON
HOWARD SCHUMAN
BARRY SCHWARTZ
DAVID F. SCHWARTZ
JOSEPH SCHWARTZ
KAREN SECCOMBE
MADY WECHSLER
SEGAL
JANE ANN SELL
RICHARD SENNETT
WILLIAM H.
SEWELL, JR.
LYLE SHANNON
TOMATSU SHIBUTANI
KAREN SHIRE
JAMES F. SHORT, JR.
RICHARD SEWEDER
ALAN SICA
JOACHIM SINGELMANN
WILLIAM SKINNER
JOHN V. SKVORETZ
LYNN SMITH-LOVIN

DAVID ALAN SNOW
ROBERT SOLOMON
AAGE B. SØRENSEN
ANNEMETTE SØRENSEN
SCOTT J. SOUTH
GLENN A. D. SPITZ
MARK B. STAFFORD
DAVID C. STARK
DARREL J.
STEFFENSMER
NICO STEHR
GEORGE P. STEINMETZ
JUDITH STEPAN-NORRIS
JOHN D. STEPHENS
ROBERT N. STERN
GILLIAN A. STEVENS
ROSS M. STOLZENBURG
ANSELM L. STRAUSS
WOLFGANG STREECK
MYRA STROBER
ROBIN STRYKER
SHELDON STRYKER
DAVID SWARTZ
C. GRAY SWICEGOOD
RICHARD P. TAUB
PEGGY A. THOITS
BARRIE THORNE
MARTA TIENDA
CHARLES TILLY
EDWARD A. TRYAKIAN
CHARLES M. TOLBERT
STEVEN A. TUCH
NANCY B. TUMA
RALPH H. TURNER
MICHAEL USEEM
PIERRE L. VAN DEN
BERGHE

LOÏC WACQUANT
LINDA J. WAITE
ROGER D. WALDINGER
MICHAEL
WALLERSTEIN
JOHN T. WALTON
DONALD WARREN
MARY CATHERINE
WATERS
DAVID L. WEAKLIEM
JEROEN WEESIE
FREDERICK D. WEIL
MARGARET WEIR
BARRY WELLMAN
CANDACE WEST
DOUGLAS L. WHITE
HARRISON C. WHITE
MARTIN K. WHYTE
AARON WILDAVSKY
HAROLD L. WILENSKY
KIRK R. WILLIAMS
RICHARD W. WILSNACK
CHRISTOPHER WINSHIP
ALAN WOLFE
ERIK OLIN WRIGHT
TOSHIO YAMAGISHI
KUZUO YAMAGUCHI
WILLIAM L. YANCEY
RUTH C. YOUNG
DAVID R. ZARET
MAURICE ZEITLIN
MORRIS ZELDITCH, JR.
VIVIANA A. ZELIZER
EVIATAR ZERUBAVEL
ARISTIDE ZOLBERG
VERA L. ZOLBERG

CONTENTS OF VOLUME 96

Articles

- 144 ABBOTT, ANDREW, and ALEXANDRA HRYCAK. Measuring Resemblance in Sequence Data: An Optimal Matching Analysis of Musicians' Careers
- 589 BAKER, WAYNE E. Market Networks and Corporate Behavior
- 1362 BARON, JAMES N., BRIAN S. MITTMAN, and ANDREW E. NEWMAN. Targets of Opportunity: Organizational and Environmental Determinants of Gender Integration within the California Civil Service, 1979-1985
- 1 BILLINGS, DWIGHT B. Religion as Opposition: A Gramscian Analysis
- 1201 BURSTEIN, PAUL. Legal Mobilization as a Social Movement Tactic: The Struggle for Equal Employment Opportunity
- 805 CLAUSEN, JOHN A. Adolescent Competence and the Shaping of the Life Course
- 805 CLAUSEN, JOHN S. See CLAUSEN, JOHN A.
- 32 COLLINS, RANDALL. See KEMPER
- 1226 CRANE, JONATHAN. The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing
- 107 DIPRETE, THOMAS A., and DAVID B. GRUSKY. Structure and Trend in the Process of Stratification for American Men and Women
- 954 ERIKSON, ROBERT. See ISHIDA
- 433 FALBO, TONI. See POSTON
- 1464 FELD, SCOTT L. Why Your Friends Have More Friends than You Do
- 1478 FRIEDKIN, NOAH E. Theoretical Foundations for Centrality Measures
- 954 GOLDTHORPE, JOHN H. See ISHIDA
- 1117 GRANT, DON SHERMAN II, and MICHAEL WALLACE. Why Do Strikes Turn Violent?
- 107 GRUSKY, DAVID B. See DIPRETE
- 265 HAGAN, JOHN, and ALBERTO PALLONI. The Social Reproduction of a Criminal Class in Working-Class London, circa 1950-1980
- 358 HOOKS, GREGORY. The Rise of the Pentagon and U.S. State Building: The Defense Program as Industrial Policy

- 144 HRYCAK, ALEXANDRA. See ABBOTT
- 954 ISHIDA, HIROSHI, JOHN H. GOLDTHORPE, and ROBERT ERIKSON. Intergenerational Class Mobility in Postwar Japan
- 69 KALLEBERG, ARNE L. See ROSENFELD
- 32 KEMPER, THEODORE D., and RANDALL COLLINS. Dimensions of Microinteraction
- 300 KROHN, MARVIN D. See MESSNER
- 1402 LAUB, JOHN H., and ROBERT J. SAMPSON. The Sutherland-Glueck Debate: On the Sociology of Criminological Knowledge
- 843 LECLERE, FELICIA B. See LICHTER
- 655 LEIFER, ERIC M. Inequality among Equals: Embedding Market and Authority in League Sports
- 1097 LEVINE, DONALD N. Simmel and Parsons Reconsidered
- 843 LICHTER, DANIEL T., FELICIA B. LECLERE, and DIANE K. McLAUGHLIN. Local Marriage Markets and the Marital Behavior of Black and White Women
- 930 LILLARD, LEE A. See WAITE
- 1441 LISKA, ALLEN E., and BARBARA D. WARNER. Functions of Crime: A Paradoxical Process
- 329 MASSEY, DOUGLAS S. American Apartheid: Segregation and the Making of the Underclass
- 843 McLAUGHLIN, DIANE K. See LICHTER
- 300 MESSNER, STEVEN F., and MARVIN D. KROHN. Class, Compliance Structures, and Delinquency: Assessing Integrated Structural-Marxist Theory
- 1362 MITTMAN, BRIAN S. See BARON
- 405 MORGAN, S. PHILIP. See PAGNINI
- 1362 NEWMAN, ANDREW E. See BARON
- 405 PAGNINI, DEANNA L., and S. PHILIP MORGAN. Inter-marriage and Social Distance among U.S. Immigrants at the Turn of the Century
- 265 PALLONI, ALBERTO. See HAGAN
- 433 POSTON, DUDLEY L., and TONI FALBO. Academic Performance and Personality Traits of Chinese Children: "Onlies" versus Others
- 1505 POWELL, BRIAN. See STEELMAN
- 1624

- 626 RAUB, WERNER, and JEROEN WEESIE. Reputation and Efficiency in Social Interactions: An Example of Network Effects
- 69 ROSENFELD, RACHEL A., and ARNE L. KALLEBERG. A Cross-national Comparison of the Gender Gap in Income
- 1402 SAMPSON, ROBERT J. See LAUB
- 895 SELTZER, JUDITH A. Legal Custody Arrangements and Children's Economic Welfare
- 1505 STEELMAN, LALA CARR, and BRIAN POWELL. Sponsoring the Next Generation: Parental Willingness to Pay for Higher Education
- 1151 STEPAN-NORRIS, JUDITH, and MAURICE ZEITLIN. "Red" Unions and "Bourgeois" Contracts
- 684 STRYKER, ROBIN. Science, Class, and the Welfare State: A Class-centered Functional Account
- 868 THORNTON, ARLAND. Influence of the Marital History of Parents on the Marital and Cohabital Experiences of Children
- 521 UEHARA, EDWINA. Dual Exchange Theory, Social Networks, and Informal Social Support
- 930 WAITE, LINDA J., and LEE A. LILLARD. Children and Marital Disruption
- 1117 WALLACE, MICHAEL. See GRANT
- 1441 WARNER, BARBARA D. See LISKA
- 1327 WEAKLIEM, DAVID L. The Two Lefts? Occupation and Party Choice in France, Italy, and the Netherlands
- 626 WEESIE, JEROEN. See RAUB
- 558 WELLMAN, BARRY, and SCOT WORTLEY. Different Strokes from Different Folks: Community Ties and Social Support
- 1073 WOLFE, ALAN. Mind, Self, Society, and Computer: Artificial Intelligence and the Sociology of Mind
- 558 WORTLEY, SCOT. See WELLMAN
- 1151 ZEITLIN, MAURICE. See STEPAN-NORRIS

Commentary and Debate

- 999 BIGGART, NICOLE WOOLSEY. See HAMILTON
- 455 CAMIC, CHARLES. Interpreting *The Structure of Social Action*: A Note on Tiryakian

- 999 HAMILTON, GARY G., and NICOLE WOOLSEY BIGGART. The Organization of Business in Taiwan: Reply to Numazaki
- 727 HOUGHTON, JOHN. See LINDER
- 727 LINDER, MARC, and JOHN HOUGHTON. Self-Employment and the Petty Bourgeoisie: Comment on Steinmetz and Wright
- 1534 LYNG, STEPHEN. Edgework Revisited: Reply to Miller
- 1530 MILLER, ELEANOR M. Assessing the Risk of Inattention to Class, Race/Ethnicity, and Gender: Comment on Lyng
- 993 NUMAZAKI, ICHIRO. State and Business in Postwar Taiwan: Comment on Hamilton and Biggart
- 186 SCIULLI, DAVID. Challenges to Weberians' Treatments of Collegiality: Comment on Waters
- 1540 SIEGELMAN, PETER. Reply to Smith
- 1539 SMITH, CHARLES W. Comment on Siegelman's Review of *Auctions*
- 736 STEINMETZ, GEORGE, and ERIK OLIN WRIGHT. Reply to Linder and Houghton
- 452 TIRYAKIAN, EDWARD A. Exegesis or Synthesis? Comments on 50 Years of *The Structure of Social Action*
- 192 WATERS, MALCOLM. Interests and Procedural Norms in the Analysis of Collegiality: Reply to Sciulli
- 736 WRIGHT, ERIK OLIN. See STEINMETZ

Review Essays

- 741 SCHEFF, THOMAS J. A New Durkheim (*Crime, Shame, and Reintegration* by John Braithwaite)
- 1007 TILLY, CHARLES. Individualism Askew (*Foundations of Social Theory* by James S. Coleman)

Book Reviews

- 1282 ABELSON, ELAINE S. *When Ladies Go A-Thieving: Shoplifters in the Victorian Department Store*. Sally S. Simpson
- 761 ACKER, JOAN. *Doing Comparable Worth: Gender, Class, and Pay Equity*. William P. Bridges
- 1068 ADAMS, REBECCA G., and ROSEMARY BLIESZNER, eds. *Older Adult Friendship: Structure and Process*. Christine L. Fry

- 1549 ARONOWITZ, STANLEY. *Science as Power: Discourse and Ideology in Modern Society*. Chandra Mukerji
- 1544 BAILEY, KENNETH D. *Social Entropy Theory*. Thomas F. Mayer
- 479 BARKOW, JEROME H. *Darwin, Sex, and Status: Biological Approaches to Mind and Culture*. Allan Mazur
- 227 BARNOUW, DAGMAR. *Weimar Intellectuals and the Threat of Modernity*. Harvey Goldman
- 511 BARON, LARRY, and MURRAY A. STRAUS. *Four Theories of Rape in American Society: A State-Level Analysis*. Mark Warr
- 1276 BARRÓW, CLYDE W. *Universities and the Capitalist State: Corporate Liberalism and the Reconstruction of American Higher Education, 1894–1928*. Barbara Ann Scott
- 1063 BEAN, LEE L., GERALDINE P. MINEAU, and DOUGLAS L. ANDERTON. *Fertility Change on the American Frontier: Adaptation and Innovation*. David I. Kertzer
- 1287 BEN-YEHUDA, NACHMAN. *The Politics and Morality of Deviance: Moral Panics, Drug Abuse, Deviant Science, and Reversed Stigmatization*. William Gronfein
- 1016 BERGTHOLD, LINDA A. *Purchasing Power in Health: Business, the State, and Health Care Politics*. Val Burris
- 466 BIANCHI, ROBERT. *Unruly Corporatism: Association Life in Twentieth-Century Egypt*. David Knoke
- 1598 BIGGART, NICOLE WOOLSEY. *Charismatic Capitalism: Direct Selling Organizations in America*. Charles W. Smith
- 201 BLUMIN, STUART M. *The Emergence of the Middle Class: Social Experience in the American City, 1760–1900*. David Grusky
- 1553 BOLLEN, KENNETH A. *Structural Equations with Latent Variables*. Ross L. Matsueda
- 1304 BORJAS, GEORGE J. *Friends or Strangers: The Impact of Immigrants on the U.S. Economy*. Yinon Cohen
- 210 BOULTON, JEREMY. *Neighborhood and Society: A London Suburb in the Seventeenth Century*. Elspeth M. Turner
- 513 BOURQUE, LINDA BROOKOVER. *Defining Rape*. Lynda Lytle Holmstrom
- 473 BOWMAN, JOHN R. *Capitalist Collective Action: Competition, Cooperation and Conflict in the Coal Industry*. Mark S. Mizruchi
- 759 BRADLEY, HARRIET. *Men's Work, Women's Work*. Karen E. Campbell

- 1581 BRETON, RAYMOND, WSEVOLOD W. ISAJIW, WARREN E. KALBACH, and JEFFREY G. REITZ. *Ethnic Identity and Equality: Varieties of Experience in a Canadian City*. Philip Kasinitz
- 504 BRINT, STEVEN, and JEROME KARABEL. *The Diverted Dream: Community Colleges and the Promise of Educational Opportunity in America, 1900-1985*. Burton R. Clark
- 483 BROWN, RICHARD D. *Knowledge Is Power: The Diffusion of Information in Early America, 1700-1865*. Claude S. Fischer
- 501 BUCHMANN, MARLIS. *The Script of Life in Modern Society*. Margaret Mooney Marini
- 772 BULATAO, RODOLFO A., J. A. PALMORE, and S. E. WARD, eds. *Choosing a Contraceptive: Method Choice in Asia and the United States*. John B. Casterline
- 1014 BURK, JAMES. *Values in the Marketplace: The American Stock Market under Federal Securities Law*. Mitchell Y. Abolafia
- 1045 BUTLER, JON. *Awash in a Sea of Faith: Christianizing the American People*. Robert Wuthnow
- 216 BUTTON, JAMES W. *Blacks and Social Change: Impact of the Civil Rights Movement in Southern Communities*. Hardy Frye
- 251 CAPLAN, NATHAN, JOHN K. WHITMORE, and MARCELLA H. CHOY. *The Boat People and Achievement in America: A Study of Family Life, Hard Work, and Cultural Values*. Rubén G. Rumbaut
- 260 CASTLES, FRANCIS G. *Australian Public Policy and Economic Vulnerability*. Philip J. O'Connell
- 749 CHAFETZ, JANET SALTZMAN. *Gender Equity: An Integrated Theory of Stability and Change*. Jean Stockard
- 1012 CHANDLER, ALFRED D., JR. *Scale and Scope: The Dynamics of Industrial Capitalism*. Neil Fligstein
- 1593 CHARLE, CHRISTOPHE. *Naissance des "intellectuels," 1880-1900*. Randall Collins
- 1264 CHASE-DUNN, CHRISTOPHER. *Global Formation: Structures of the World-Economy*. George M. Thomas
- 1566 CHILCOTE, RONALD H. *Power and the Ruling Classes in Northeast Brazil: Juazeiro and Petrolina in Transition*. Kathleen C. Schwartzman
- 1611 CHIN, KO-LIN. *Chinese Subculture and Criminality: Non-traditional Crime Groups in America*. Bernard N. Meltzer
- 1628

- 514 CICCETTI, DANTE, and VICKI CARLSON, eds. *Child Maltreatment: Theory and Research on the Causes and Consequences of Child Abuse and Neglect*. Richard J. Gelles
- 471 CLARK, CAL. *Taiwan's Development: Implications for Contending Political Economy Paradigms*. Richard E. Barrett
- 517 CLOTFELTER, CHARLES T., and PHILIP J. COOK. *Selling Hope: State Lotteries in America*. Teresa A. Sullivan
- 790 COCLANIS, PETER A. *The Shadow of a Dream: Economic Life and Death in the South Carolina Low Country, 1670-1920*. Dale Tomich
- 778 CONDIT, CELESTE MICHELLE. *Decoding Abortion Rhetoric: Communicating Social Change*. Joan Vera Vecchia
- 1561 CONROY, W. J. *Challenging the Boundaries of Reform: Socialism in Burlington*. John B. Hannum
- 1606 CORBIN, ALAIN. *Women for Hire: Prostitution and Sexuality in France after 1850*. Kathleen Barry
- 1032 CORNFIELD, DANIEL B. *Becoming a Mighty Voice: Conflict and Change in the United Furniture Workers of America*. Howard Kimeldorf
- 1551 COZZENS, SUSAN E. *Social Control and Multiple Discovery in Science: The Opiate Receptor Case*. Lowell L. Hargens
- 203 CRAWFORD, STEPHEN. *Technical Workers in an Advanced Society: The Work, Careers and Politics of French Engineers*. Vicki Smith
- 1262 DANDEKER, CHRISTOPHER. *Surveillance, Power and Modernity: Bureaucracy and Discipline from 1700 to the Present Day*. Richard V. Ericson
- 1614 DAVIES, CHRISTIE. *Ethnic Humor around the World: A Comparative Analysis*. Howard J. Ehrlich
- 238 DAVIS, KATHY. *Power under the Microscope: Toward a Grounded Theory of Gender Relations in Medical Encounters*. Monica Heller
- 1310 DERBER, CHARLES, WILLIAM A. SCHWARTZ, and YALE MAGGRASS. *Power in the Highest Degree: Professionals and the Rise of a New Mandarin Order*. Magali Sarfatti Larson
- 514 DORNE, CLIFFORD K. *Crimes against Children*. Richard J. Gelles
- 1297 DORST, JOHN D. *The Written Suburb: An American Site, an Ethnographic Dilemma*. Bonnie Lindstrom

- 1575 DUSTER, TROY. *Backdoor to Eugenics*. Stanley Aronowitz
- 246 ECCLES, ROBERT G., and DWIGHT B. CRANE. *Doing Deals: Investment Banks at Work*. James P. Walsh
- 799 ECHOLS, ALICE. *Daring to Be Bad: Radical Feminism in America, 1967-1975*. Aldon Morris
- 214 EDELSTEIN, MICHAEL. *Contaminated Communities: The Social and Psychological Impacts of Residential Toxic Exposure*. Stella M. Capek
- 223 ELSTER, JON. *The Cement of Society: A Study of Social Order*. Anthony Giddens
- 1546 ELSTER, JON. *Nuts and Bolts for the Social Sciences*. Mark Gould
- 784 ERICSON, RICHARD V., PATRICIA M. BARANEK, and JANET B. L. CHAN. *Negotiating Control: A Study of News Sources*. P. K. Manning
- 1555 ESPING-ANDERSEN, GÖSTA. *The Three Worlds of Welfare Capitalism*. Claus Offe
- 761 EVANS, SARA M., and BARBARA J. NELSON. *Wage Justice: Comparable Worth and the Paradox of Technocratic Reform*. William P. Bridges
- 1593 FABIANI, JEAN-LOUIS. *Les philosophes de la République*. Randall Collins
- 253 FASS, PAULA S. *Outside In: Minorities and the Transformation of American Education*. David Tyack
- 1564 FERGUSON, JAMES. *The Anti-politics Machine: "Development," Depoliticization and Bureaucratic Power in Lesotho*. Bruce M. Koppel
- 782 FINKELSTEIN, JOANNE. *Dining Out: A Sociology of Modern Manners*. Liora Gvion-Rosenberg
- 1285 FISHMAN, LAURA T. *Women at the Wall: A Study of Prisoners' Wives Doing Time on the Outside*. Nancy Naples
- 1269 FISHMAN, ROBERT M. *Working-Class Organization and the Return to Democracy in Spain*. Roberto P. Korzeniewicz
- 1591 FITZPATRICK, ELLEN. *Endless Crusade: Women Social Scientists and Progressive Reform*. Mary Jo Deegan
- 752 FOX, ROBIN. *The Search for Society: Quest for a Biosocial Science and Morality*. Kevin L. Brown
- 1320 FUGITT, GLENN V., DAVID L. BROWN, and CALVIN L. BEALE. *Rural and Small Town America*. Leif Jensen
- 1630

- 1583 GERSTLE, GARY. *Working-Class Americanism: The Politics of Labor in a Textile City, 1914-1960*. David Halle
- 750 GIBBS, JACK P. *Control: Sociology's Central Notion*. Travis Hirschi
- 1042 GILBERT, NEIL, and BARBARA GILBERT. *The Enabling State: Modern Welfare Capitalism in America*. Larry W. Isaac
- 1586 GOLDIN, CLAUDIA. *Understanding the Gender Gap: An Economic History of American Women*. Joan R. Acker
- 493 GOLDSMITH, PETER D. *When I Rise Cryin' Holy: African-American Denominationalism on the Georgia Coast*. Hart M. Nelsen
- 1609 GOTTFREDSON, MICHAEL R., and TRAVIS HIRSCHI. *A General Theory of Crime*. Charles R. Tittle
- 470 GOUGH, KATHLEEN. *Rural Change in Southeast India, 1950s to 1980s*. Shelley Feldman
- 1047 GREEN, BRYAN S. *Literary Methods and Sociological Theory: Case Studies of Simmel and Weber*. Donald N. Levine
- 499 GREENBERG, DAVID F. *The Construction of Homosexuality*. Stuart Michaels
- 485 GREENFELD, LIAH. *Different Worlds: A Sociological Study of Taste, Choice and Success in Art*. Samuel Gilmore
- 793 GROSSMAN, JAMES R. *Land of Hope: Chicago, Black Southerners, and the Great Migration*. S. Hicks-Bartlett
- 1050 HADARI, SAGUIV A. *Theory in Practice: Tocqueville's New Science of Politics*. Jeff Weintraub
- 1589 HAKRI, SHAHLA. *Law of Desire: Temporary Marriage in Shi'i Iran*. Minoo Moallem
- 1557 HAGE, JERALD, ROBERT HANNEMAN, and EDWARD T. GARGAN. *State Responsiveness and State Activism*. Edwin Amenta
- 1023 HAMILTON, STEPHEN F. *Apprenticeship for Adulthood: Preparing Youth for the Future*. Amy Heebner and Robert L. Crain
- 248 HANNAWAY, JANE. *Managers Managing: The Workings of an Administrative System*. Kent D. Peterson
- 1299 HAZZARD-GORDON, KATRINA. *Jookin': The Rise of Social Dance Formations in African-American Culture*. Charles Stevens
- 1267 HENDERSON, JEFFREY. *The Globalisation of High Technology Production: Society, Space and Semiconductors in the Restructuring of the Modern World*. Gary Gereffi

- 497 HEWITT, JOHN P. *Dilemmas of the American Self*. Leon Anderson
- 801 HIMMELSTEIN, JEROME L. *To the Right: The Transformation of American Conservatism*. Rebecca E. Klatch
- 464 HINTZEN, PERCY C. *The Costs of Regime Survival: Racial Mobilization, Elite Domination and Control of the State in Guyana and Trinidad*. Daniel Segal
- 1036 HIRSCH, ERIC L. *Urban Revolt: Ethnic Politics in the Nineteenth-Century Chicago Labor Movement*. Holly McCammon
- 776 HOCHSCHILD, ARLIE, with ANNE MACHUNG. *The Second Shift: Working Parents and the Revolution at Home*. Rosanna Hertz
- 234 HOFFMAN, LILY M. *The Politics of Knowledge: Activist Movements in Medicine and Planning*. Ira J. Goldstein
- 494 HOMANS, PETER. *The Ability to Mourn: Disillusionment and the Social Origins of Psychoanalysis*. Jorge Balán
- 244 HORNSBY-SMITH, MICHAEL. *The Changing Parish*. John A. Coleman, S.J.
- 1562 HUANG, PHILIP C. C. *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988*. Martin King Whyte
- 262 HUANG SHU-MIN. *The Spiral Road: Change in a Chinese Village through the Eyes of a Communist Party Leader*. Richard Madsen.
- 258 HUBBARD, ROBERT L., MARY ELLEN MARSDEN, J. VALLEY RACHAL, HENRICK J. HARWOOD, ELIZABETH R. CAVANAUGH, and HAROLD M. GINZBURG. *Drug Abuse Treatment: A National Study of Effectiveness*. Ira R. Kaufmann
- 1613 IANNI, FRANCIS A. J. *The Search for Structure: A Report on American Youth Today*. Sanford M. Dornbusch
- 1274 INGLEHART, RONALD. *Culture Shift in Advanced Industrial Society*. James J. Dowd
- 1604 IRVINE, JANICE M. *Disorders of Desire: Sex and Gender in Modern American Sexology*. Arlene J. Stein
- 1059 JOHNSON, ROBERT. *Death Work: A Study of the Modern Execution Process*. Raymond L. Schmitt
- 1065 JONES, ELISE F., JACQUELINE DARROCH FORREST, STANLEY K. HENSHAW, JANE SILVERMAN, and AIDA TORRES. *Pregnancy, Contraception and Family Planning Services in Industrialized Countries*. Krishnan Namboodiri
- 482 KELLNER, DOUGLAS. *Jean Baudrillard: From Marxism to Post-modernism and Beyond*. John W. Murphy

- 1057 KENNEDY, LESLIE W. *On the Borders of Crime: Conflict Management and Criminology*. Robert J. Sampson
- 1066 KERTZER, DAVID I., and DENNIS P. HOGAN. *Family, Political Economy, and Demographic Change: The Transformation of Life in Casalecchio, Italy, 1861-1921*. Peter Laslett
- 1307 KNOKE, DAVID. *Organizing for Collective Action: The Political Economies of Associations*. Arthur L. Stinchcombe
- 243 KOOISTRA, PAUL. *Criminals as Heroes: Structure, Power and Identity*. Ralph A. Austen
- 1577 KRAUS, VERED, and ROBERT W. HODGE. *Promises in the Promised Land: Mobility and Inequality in Israel*. Robert A. Han-neman
- 1312 KRIEGER, MARTIN H. *Marginalism and Discontinuity: Tools for the Crafts of Knowledge and Decision*. Ellsworth R. Fuhrman
- 1316 KURZWEIL, EDITH. *The Freudians: A Comparative Perspective*. Peter Homans
- 1027 LAGEMANN, ELLEN CONDLIFFE. *The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy*. John H. Stanfield II
- 1029 LANDON, DONALD D. *Country Lawyers: The Impact of Context on Professional Practice*. Austin Sarat
- 232 LATOUR, BRUNO. *The Pasteurization of France* (translated by Alan Sheridan and John Law). Harry Paul
- 1579 LIEBMAN, CHARLES S., and STEVEN M. COHEN. *Two Worlds of Judaism: The Israeli and American Experiences*. M. Herbert Danzger
- 1600 LINCOLN, JAMES R., and ARNE L. KALLEBERG. *Culture, Control, and Commitment: A Study of Work Organization and Work Attitudes in the United States and Japan*. Carmi Schooler
- 1573 LINDHOLM, CHARLES. *Charisma*. John R. Hall
- 1034 LING, PETER J. *America and the Automobile: Technology, Reform and Social Change, 1893-1923*. David Gartman
- 1040 LIPSET, SEYMOUR MARTIN. *Continental Divide: The Values and Institutions of the United States and Canada*. Edward A. Tiry-akian
- 1272 LO, CLARENCE. *Small Property versus Big Government: Social Origins of the Property Tax Revolt*. Roberta Garner
- 747 LUHMANN, NIKLAS. *Ecological Communication*. Stephan Fuchs

- 491 LUHRMANN, T. M. *Persuasions of the Witch's Craft: Ritual Magic in Contemporary England*. Mary Jo Neitz
- 212 LYSON, THOMAS A. *Two Sides to the Sunbelt: The Growing Divergence between the Rural and Urban South*. Donald E. Voth
- 1271 MABILEAU, ALBERT, GEORGE MOYSER, GERAINT PARRY, and PATRICK QUANTIN. *Local Politics and Participation in Britain and France*. Roger V. Gould
- 1596 MACINTOSH, DONALD, and DAVID WHITSON. *The Game Planners: Transforming Canada's Sport System*. James H. Frey
- 1278 MANN, SUSAN ARCHER. *Agrarian Capitalism in Theory and Practice*. Jess Gilbert
- 755 MARCEAU, JANE. *A Family Business? The Making of an International Business Elite*. Dan Clawson
- 793 MARKS, CAROLE. *Forewell—We're Good and Gone: The Great Black Migration*. S. Hicks-Bartlett
- 1569 MARTIN, RANDY. *Performance as Political Act: The Embodied Self*. Loïc J. D. Wacquant
- 1031 MARTIN, ROSS M. *Trade Unionism: Purposes and Forms*. Raymond A. Friedman
- 230 MAZLISH, BRUCE A. *New Science: The Breakdown of Connections and the Birth of Sociology*. Steven Seidman
- 1309 MCINTOSH, WAYNE V. *The Appeal of Civil Law: A Political-Economic Analysis of Litigation*. Neal Shover
- 221 MELUCCI, ALBERTO, edited by JOHN KEANE and PAUL MIER. *Nomads of the Present: Social Movements and Individual Needs in Contemporary Society*. Bert Klandermans
- 228 MEŠTROVIĆ, STJEPAN G. *Émile Durkheim and the Reformation of Sociology*. Marco Orrù
- 1280 MILLER, DOROTHY C. *Women and Social Welfare: A Feminist Analysis*. Lisa D. Brush and Kristin K. Barker
- 1021 MILOFSKY, CARL. *Testers and Testing: The Sociology of School Psychology*. Jane Hannaway
- 496 MIROWSKY, JOHN, and CATHERINE E. ROSS. *Social Causes of Psychological Distress*. Ann Stueve and Bruce Link
- 507 MOEN, PHYLLIS. *Working Parents: Transformations in Gender Roles and Public Policies in Sweden*. Annemette Sørensen
- 1025 MUGNY, GABRIEL, and FELICE CARUGATI. *Social Representations of Intelligence*. Carl Milofsky

- 480 MURPHY, RAYMOND. *Social Closure: The Theory of Monopolization and Exclusion*. David Swartz
- 205 NASH, JUNE C. *From Tank Town to High Tech: The Clash of Community and Industrial Cycles*. C. C. Harris
- 1060 NICHOLAS, STEPHEN, ed. *Convict Workers: Reinterpreting Australia's Past*. Philip McMichael
- 754 OPP, KARL-DIETER. *The Rationality of Political Protest: A Comparative Analysis of Rational Choice Theory*. William Brustein
- 1559 OST, DAVID. *Solidarity and the Politics of Anti-politics: Opposition and Reform in Poland since 1968*. Daniel Krymkowski
- 509 PAHL, JAN. *Money and Marriage*. Pepper Schwartz
- 462 PAMPEL, FRED C., and JOHN B. WILLIAMSON. *Age, Class, Politics, and the Welfare State*. Alexander Hicks
- 1587 PARKER, STEPHEN. *Informal Marriage, Cohabitation and the Law, 1750-1989*. Haya Stier
- 1054 PARSA, MISAGH. *Social Origins of the Iranian Revolution*. Bertrand Badie
- 1314 PAWSON, RAY. *A Measure for Measures: A Manifesto for Empirical Sociology*. David G. Wagner
- 766 PELED, YOAV. *Class and Ethnicity in the Pale: The Political Economy of Jewish Workers' Nationalism in Late Imperial Russia*. Amy S. Wharton
- 780 PHILLIPSON, MICHAEL. *In Modernity's Wake: The Ameurunculus Letters*. Steven Best
- 1584 PHIZACKLEA, ANNIE. *Unpacking the Fashion Industry: Gender, Racism, and Class in Production*. Sonya O. Rose
- 774 POPENOE, DAVID. *Disturbing the Nest: Family Change and Decline in Modern Societies*. Barbara Hobson
- 236 PORTER, DOROTHY, and ROY PORTER. *Patient's Progress: Doctors and Doctoring in Eighteenth-Century England*. Alexandra Dundas Todd
- 1302 PORTES, ALEJANDRO, and RUBÉN G. RUMBAUT. *Immigrant America: A Portrait*. Thomas J. Espenshade
- 518 POWELL, MICHAEL J. *From Patrician to Professional Elite: The Transformation of the New York City Bar Association*. E. Digby Baltzell
- 488 PRESTON, DAVID L. *The Social Organization of Zen Practice*. Steven Tipton

- 506 PURVIS, JUNE. *Hard Lessons: The Lives and Education of Working-Class Women in Nineteenth Century England*. Sara Delamont
- 477 RICHARDSON, THERESA R. *The Century of the Child: The Mental Hygiene Movement and Social Policy in the United States and Canada*. John R. Sutton
- 1292 RIORDAN, CORNELIUS. *Girls and Boys in School: Together or Separate?* Alan C. Kerckhoff
- 255 ROSSI, PETER H. *Down and Out in America: The Origins of Homelessness*. Richard P. Appelbaum
- 207 RUDEL, THOMAS K. *Situations and Strategies in American Land-Use Planning*. Avery M. Guest
- 1607 SANDAY, PEGGY REEVES. *Fraternity Gang Rape: Sex, Brotherhood, and Privilege on Campus*. Michael S. Kimmel
- 225 SCAFF, LAWRENCE A. *Fleeing the Iron Cage: Culture, Politics, and Modernity in the Thought of Max Weber*. Malcolm Waters
- 1017 SCHWARTZ, MILDRED A. *The Party Network: The Robust Organization of Illinois Republicans*. David Knoke
- 241 SCHWARTZMAN, HELEN. *The Meeting: Gatherings in Organizations and Communities*. Gary Alan Fine
- 768 SCHWARTZMAN, KATHLEEN C. *The Social Origins of Democratic Collapse: The First Portuguese Republic in the Global Economy*. Kevin Neuhauser
- 797 SCRANTON, PHILIP. *Figured Tapestry: Production, Markets, and Power in Philadelphia Textiles, 1885-1941*. Richard Biernacki
- 1323 SHAFIR, GERSHON. *Land, Labor and the Origins of the Israeli-Palestinian Conflict, 1882-1914*. John Foran
- 219 SHAIN, YOSSI. *The Frontier of Loyalty: Political Exiles in the Age of the Nation-State*. Rogers Brubaker
- 1304 SIMON, JULIAN L. *The Economic Consequences of Immigration*. Yinon Cohen
- 1322 SIU, HELEN F. *Agents and Victims in South China: Accomplices in Rural Revolution*. David Zweig
- 468 SKLAIR, LESLIE. *Assembling for Development: The Maquila Industry in Mexico and the United States*. Susan Tian
- 1019 SLAUGHTER, SHEILA. *The Higher Learning and High Technology: Dynamics of Higher Education Policy Formation*. David Levinson

- 786 SMITH, ERIC R. A. N. *The Unchanging American Voter*. Martin Gilens
- 757 SOBEL, RICHARD. *The White Collar Working Class: From Structure to Politics*. William Martin
- 1318 SOLOWAY, RICHARD A. *Demography and Degeneration: Eugenics and the Declining Birthrate in Twentieth-Century Britain*. Douglas L. Anderton
- 1300 SPITZER, LEO. *Lives in Between: Assimilation and Marginality in Austria, Brazil, and West Africa, 1780-1945*. Zai Liang
- 1296 STEBBINS, ROBERT A. *The Laugh-Makers: Stand-up Comedy as Art, Business, and Life-Style*. Lori V. Morris
- 1071 STEINMETZ, PAUL B. *Pipe, Bible, and Peyote among the Oglala Lakota: A Study in Religious Identity*. J. D. Y. Peel
- 788 STONE, CLARENCE N. *Regime Politics: Governing Atlanta, 1946-1988*. Terry Nichols Clark and Lisa Southerland
- 207 STORPER, MICHAEL, and RICHARD WALKER. *The Capitalist Imperative: Territory, Technology, and Industrial Growth*. Avery M. Guest
- 1289 SULLIVAN, MERCER L. *Getting Paid: Youth Crime and Work in the Inner City*. Donald Cunnigen
- 1567 SUTTLES, GERALD D. *The Man-made City: The Land-use Confidence Game in Chicago*. Harvey Molotch
- 460 SWENSON, PETER. *Fair Shares: Unions, Pay, and Politics in Sweden and West Germany*. Wolfgang Streeck
- 765 SZEMAN, ZSUZSA. *Pensioners on the Labor Market: A Failure in Welfare*. Elwood Carlson
- 487 TAYLOR, ELLA. *Prime Time Families: Television Culture in Post-war America*. Tamar Liebes
- 1571 THOMPSON, MICHAEL, RICHARD ELLIS, and AARON WILDAVSKY. *Cultural Theory*. Elisabeth S. Clemens
- 1260 TILLY, CHARLES. *Coercion, Capital and European States, A.D. 990-1990*. Michael Mann
- 238 TODD, ALEXANDER DUNDAS. *Intimate Adversaries: Cultural Conflict between Doctors and Women Patients*. Monica Heller
- 1542 TURNER, STEPHEN PARK, and JONATHAN H. TURNER. *The Impossible Science: An Institutional Analysis of American Sociology*. Charles Camic
- 1055 TYLER, TOM R. *Why People Obey the Law*. H. Laurence Ross

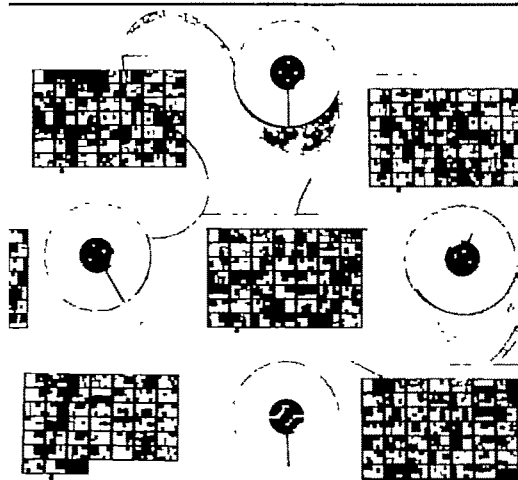
- 218 USEEM, BERT, and PETER KIMBALL. *States of Siege: U.S. Prison Riots, 1971-1986*. Ramiro Martínéz
- 1068 VAN WILLIGEN, JOHN. *Gettin' Some Age on Me: Social Organisation of Older People in a Rural American Community*. Christine L. Fry
- 1038 VASILIADAS, PETER. *Dangerous Truth: Interethnic Competition in a Northeastern Ontario Goldmining Center*. Philip Corrigan
- 475 WADDINGTON, DAVID, KAREN JONES, and CHAS CRITCHER. *Flashpoints: Studies in Public Disorder*. Desmond S. King
- 796 WAXMAN, CHAIM I. *American Aliya: Portrait of an Innovative Migration Movement*. Katharine M. Donato
- 1290 WEIS, LOIS. *Working Class without Work: High School Students in a Deindustrialising Economy*. Henry M. Levin
- 1052 WHALEN, JACK, and RICHARD FLACKS. *Beyond the Barricades: The Sixties Generation Grows Up*. Howard Schuman
- 1602 WOLF, JAMES G., ed. *Gay Priests*. Bob Blauner
- 249 WONG, SIU-LIN. *Emigrant Entrepreneurs: Shanghai Industrialists in Hong Kong*. Ivan Light
- 798 WOODIWISS, MICHAEL. *Crime Crusades and Corruption: Prohibition in the United States, 1900-1987*. G. David Curry
- 1282 WORRALL, ANNE. *Offending Women: Female Lawbreakers and the Criminal Justice System*. Sally S. Simpson
- 255 WRIGHT, JAMES D. *Address Unknown: The Homeless in America*. Richard P. Appelbaum
- 770 ZOLBERG, ARISTIDE R., ASTRI SUHRKE, and SERGIO AGUAYO. *Escape from Violence: Conflict and the Refugee Crisis in the Developing World*. Kurt Lang
- 1294 ZOLBERG, VERA L. *Constructing a Sociology of the Arts*. Judith Adler

BOOK REVIEWERS

- MITCHEL Y. ABOLAFIA, 1014
 JOAN R. ACKER, 1586
 JUDITH ADLER, 1294
 EDWIN AMENTA, 1557
 LEON ANDERSON, 497
 DOUGLAS L. ANDERTON, 1318
 RICHARD P. APPELBAUM, 255
 STANLEY ARONOWITZ, 1575
 RALPH A. AUSTEN, 243
 BERTRAND BADIE, 1054
 JORGE BALÁN, 494
 E. DIGBY BALTZELL, 518
 KRISTIN K. BARKER, 1280
 RICHARD E. BARRETT, 471
 KATHLEEN BARRY, 1606
 STEVEN BEST, 780
 RICHARD BIERNACKI, 797
 BOB BLAUNER, 1602
 WILLIAM P. BRIDGES, 761
 KEVIN L. BROWN, 752
 ROGERS BRUBAKER, 219
 LISA D. BRUSH, 1280
 WILLIAM BRUSTEIN, 754
 VAL BURRIS, 1016
 CHARLES CAMIC, 1542
 KAREN E. CAMPBELL, 759
 STELLA M. ČAPEK, 214
 ELWOOD CARLSON, 765
 JOHN B. CASTERLINE, 772
 BURTON R. CLARK, 504
 TERRY NICHOLS CLARK, 788
 DAN CLAWSON, 755
 ELISABETH S. CLEMENS, 1571
 YINON COHEN, 1304
 JOHN A. COLEMAN, S.J., 244
 RANDALL COLLINS, 1593
 PHILIP CORRIGAN, 1038
 ROBERT L. CRAIN, 1023
 DONALD CUNNIGEN, 1289
 G. DAVID CURRY, 798
 M. HERBERT DANZGER, 1579
 MARY JO DEEGAN, 1591
 SARA DELAMONT, 506
 KATHARINE M. DONATO, 796
 SANFORD M. DORNBUSCH, 1613
 JAMES J. DOWD, 1274
 HOWARD J. EHRLICH, 1614
 RICHARD V. ERICSON, 1262
 THOMAS J. ESPENSHADE, 1302
 SHELLEY FELDMAN, 470
 GARY ALAN FINE, 241
 CLAUDE S. FISCHER, 483
 NEIL FLIGSTEIN, 1012
 JOHN FORAN, 1323
 JAMES H. FREY, 1596
 RAYMOND A. FRIEDMAN, 1031
 CHRISTINE L. FRY, 1068
 HARDY THOMAS FRYE, 216
 STEPHAN FUCHS, 747
 ELLSWORTH R. FUHRMAN, 1312
 ROBERTA GARNER, 1272
 DAVID GARTMAN, 1034
 RICHARD J. GELLES, 514
 GARY GEREFFI, 1267
 ANTHONY GIDDENS, 223
 JESS GILBERT, 1278
 MARTIN GILENS, 786
 SAMUEL GILMORE, 485
 HARVEY GOLDMAN, 227
 IRA J. GOLDSTEIN, 234
 MARK GOULD, 1546
 ROGER V. GOULD, 1271
 WILLIAM GRONFEIN, 1287
 DAVID B. GRUSKY, 201
 AVERY M. GUEST, 207
 LIORA GVION-ROSENBERG, 782
 JOHN R. HALL, 1573
 DAVID HALLE, 1583
 JANE HANNAWAY, 1021
 ROBERT A. HANNEMAN, 1577
 JOHN B. HANNUM, 1561
 LOWELL L. HARGENS, 1551
 C. C. HARRIS, 205
 AMY HEEBNER, 1023
 MONICA HELLER, 238
 ROSANNA HERTZ, 776
 ALEXANDER HICKS, 462
 S. HICKS-BARTLETT, 793
 TRAVIS HIRSCHI, 750
 BARBARA HOBSON, 774
 LYNDA LYTLE HOLMSTROM, 513
 PETER HOMANS, 1316
 LARRY W. ISAAC, 1042
 LEIF JENSEN, 1320
 PHILIP KASINTZ, 1581
 IRA R. KAUFMANN, 258
 ALAN C. KERCKHOFF, 1292
 DAVID I. KERTZER, 1063
 HOWARD KIMELDORF, 1032
 MICHAEL S. KIMMEL, 1607
 DESMOND S. KING, 475
 BERT KLANDERMANS, 221
 REBECCA E. KLATCH, 801
 DAVID KNOKE, 466, 1017

- BRUCE M. KOPPEL, 1564
 ROBERTO P. KORZENIEWICZ, 1269
 DANIEL KRYMKOWSKI, 1559
 KURT LANG, 770
 MAGALI SARFATTI LARSON, 1310
 PETER LASLETT, 1066
 HENRY M. LEVIN, 1290
 DONALD N. LEVINE, 1047
 DAVID L. LEVINSON, 1019
 ZAI LIANG, 1300
 TAMAR LIEBES, 487
 IVAN LIGHT, 249
 BONNIE LINDSTROM, 1297
 BRUCE LINK, 496
 RICHARD MADSEN, 262
 MICHAEL MANN, 1260
 P. K. MANNING, 784
 MARGARET MOONEY MARINI, 501
 BILL MARTIN, 757
 RAMIRO MARTINEZ, JR., 218
 ROSS L. MATSUEDA, 1553
 THOMAS F. MAYER, 1544
 ALLAN MAZUR, 479
 HOLLY McCAMMON, 1036
 PHILIP McMICHAEL, 1060
 BERNARD N. MELTZER, 1611
 STUART MICHAELS, 499
 CARL MILOFSKY, 1025
 MOALLEM MINOO, 1589
 MARK S. MIZRUCHI, 473
 HARVEY MOLOTCH, 1567
 ALDON MORRIS, 799
- LORI V. MORRIS, 1296
 CHANDRA MUKERJI, 1549
 JOHN W. MURPHY, 482
 KRISHNAN NAMBOODIRI, 1065
 NANCY A. NAPLES, 1285
 MARY JO NEITZ, 491
 HART M. NELSEN, 493
 KEVIN NEUHouser, 768
 PHILIP J. O'CONNELL, 268
 CLAUS OFFE, 1555
 MARCO ORRÙ, 228
 HARRY W. PAUL, 232
 J. D. Y. PEEL, 1071
 KENT D. PETERSON, 248
 SONYA O. ROSE, 1584
 H. LAURENCE ROSS, 1055
 RUBÉN G. RUMBAUT, 251
 ROBERT J. SAMPSON, 1057
 AUSTIN SARAT, 1029
 RAYMOND L. SCHMITT, 1059
 CARMi SCHOOLER, 1600
 HOWARD SCHUMAN, 1052
 PEPPER SCHWARTZ, 509
 KATHLEEN C. SCHWARTZMAN, 1566
 BARBARA ANN SCOTT, 1276
 DANIEL SEGAL, 464
 STEVEN SEIDMAN, 230
 NEAL SHOVER, 1309
 SALLY S. SIMPSON, 1282
 CHARLES W. SMITH, 1598
 VICKI SMITH, 203
 ANNEMETTE SØRENSEN, 507
 LISA SOUTHERLAND, 788
- JOHN H. STANFIELD II, 1027
 ARLENE J. STEIN, 1604
 CHARLES STEVENS, 1299
 HAYA STIER, 1587
 ARTHUR L. STINCHCOMBE, 1307
 JEAN STOCKARD, 749
 WOLFGANG STREECK, 460
 ANN STUEVE, 496
 TERESA A. SULLIVAN, 517
 JOHN R. SUTTON, 477
 DAVID SWARTZ, 480
 GEORGE M. THOMAS, 1264
 SUSAN TIANO, 468
 STEVEN M. TIPTON, 488
 EDWARD A. TIRYAKIAN, 1040
 CHARLES R. TITTLE, 1609
 ALEXANDRA DUNDAS TODD, 236
 DALE TOMICH, 790
 ELSPETH M. TURNER, 210
 DAVID TYACK, 253
 JOAN VERA VECCHIA, 778
 DONALD E. VOTH, 212
 LOIC J. D. WACQUANT, 1569
 DAVID G. WAGNER, 1314
 JAMES P. WALSH, 246
 MARK WARR, 511
 MALCOLM WATERS, 225
 JEFF WEINTRAUB, 1050
 AMY S. WHARTON, 766
 MARTIN KING WHYTE, 1562
 ROBERT WUTHNOW, 1045
 DAVID ZWEIG, 1322

**This publication is
available in microform.**



UMI reproduces this publication in microform: microfiche and 16 or 35mm microfilm. For information about this publication or any of the more than 16,000 periodicals and 7,000 newspapers we offer, complete and mail this coupon to UMI, 300 North Zeeb Road, Ann Arbor, MI 48106 USA. Or call us toll-free for an immediate response: 800-521-0600. From Alaska and Michigan call collect 313-761-4700. From Canada call toll-free 800-343-5299.

Please send me information about the titles I've listed below

Name _____

Title _____

Company/institution _____

Address _____

City/State/Zip _____

Phone (____) _____

U·M·I

A Bell & Howell Company
300 North Zeeb Road, Ann Arbor, MI 48106 USA
800-521-0600 toll-free
313-761-4700 collect from Alaska and Michigan
800-343-5299 toll-free from Canada

CALL FOR PAPERS

Journal of SOCIAL DISTRESS and the Homeless

Editor: R. W. Rieber

The new quarterly, *Journal of Social Distress and the Homeless* provides an interdisciplinary forum for improving understanding of psychosocial distress and its related problems. This international journal welcomes contributions which adopt a unique approach to social distress by exploring its links to specific issues such as homelessness, violence, and racial tension, among others, and its institutionalization in modern American culture. Articles explore the nature and effects of social distress and disorganization across the culture in such areas as the educational, health care, and criminal justice systems. Contributed articles are reviewed by an editorial board composed of international experts, and further information for those interested in contributing manuscripts can be obtained from:

R. W. Rieber

Editor, *Journal of Social Distress and the Homeless*

John Jay College

445 West 59th Street

New York, NY 10019

Subscription: Volume 1, 1991
(4 issues)

Institutional rate:

\$80.00 in US/\$95.00 elsewhere

Personal rate:

\$35.00 in US/\$40.00 elsewhere

Send for a free examination copy!

HUMAN SCIENCES PRESS, INC.

233 Spring Street

New York, NY 10013-1578

Telephone orders: 212-620-8000/

1-800-221-9369



Sociality

NEW FROM CALIFORNIA

Islands in the Street

Gangs and American Urban Society

Martin Sánchez Jankowski

"Jankowski presents the gang and its members not as pathological departures from social norms, but as shrewd and resourceful operators who strive to take advantage of the limited opportunities they encounter."

—Michael Lipsky, M.I.T.

\$24.95 cloth, 336 pp.

Forces of Order

Policing Modern Japan

David H. Bayley

Revised Edition. "An important contribution to our understanding of the socio-cultural foundations of police behavior. . . . No one with a serious interest in the police and their problems can afford to ignore this excellent comparative analysis of police behavior in Japan."—*Sociology*

\$35.00 cloth, \$12.95 paper, 216 pp.

Strategies for Learning

Small-Group Activities in American, Japanese, and Swedish Industry

Robert E. Cole

"A revealing, jargon-free look at why corporations in Japan and Sweden more readily adopted quality circles (Japan) or semi-autonomous work groups (Sweden) than did U.S. firms."

—*Choice*

New in paper—\$13.95 paper, 364 pp.

Landscapes of Power

From Detroit to Disney World

Sharon Zukin

"Everybody's personal identity, and every collective hope, depend on complex mediation between the local and the global. Zukin . . . gives us a brilliant example of the kind of multidimensional thinking we are all going to need."—Marshall Berman, author

of *All That Is Solid Melts Into Air*

\$24.95 cloth, 290 pp.

Between Feminism and Labor

The Significance of the

Comparable Worth Movement

Linda M. Blum

"An astute and groundbreaking analysis of the comparable worth strategy for gender pay equity."—Judith Stacey,

author of *Patriarchy &*

Socialist Revolution in China

\$30.00 cloth, \$11.95 paper, 242 pp.

Gender Differences at Work

Women and Men in

Nontraditional Occupations

Christine L. Williams

Foreword by Neil J. Smelser

"Demonstrates that a sociology informed by psychoanalysis can give us important insights into the nature of our society and culture."—Eli Sagan, author of *Freud, Women, and Morality*

\$11.95 paper, 206 pp.

Sociology

NEW FROM CALIFORNIA

Inheriting Madness

Professionalization and
Psychiatric Knowledge in
Nineteenth-Century France
Ian Dowbiggin

Dowbiggin traces the rise in popularity of hereditarianism in France during the second half of the 19th century to illuminate the nature and evolution of psychiatry during this period.

Medicine and Society
\$29.95 cloth, 232 pp.

Dream Worlds

Mass Consumption in Late
Nineteenth-Century France
ROSALIND H. WILLIAMS

"Illuminates the motives of sociological theorists of the late nineteenth and early twentieth centuries. . . . Extremely beneficial for sociologists."

—*Contemporary Sociology*

New in paper—\$14.95 paper, 463 pp.

Literary France

The Making of a Culture
Priscilla Parkhurst Clark
With a new preface—"A comprehensive, ambitious, and witty interpretation of the literary enterprise in France, a major contribution to the sociology of literature."

—*The American Journal of Sociology*

New in paper—\$12.95 paper, 289 pp.

New Families, No Families?

The Transformation of the
American Home
Frances K. Goldscheider and
Linda J. Waite

In this sweeping, longitudinal study, the authors discuss the experiences that most determine the kind of families and living arrangements young adults form.

Studies in Demography
\$34.95 cloth, 356 pp.

Whose Keeper?

Social Science and Moral
Obligation
Alan Wolfe

"A cogent, interesting, often lively book. His grasp of the social sciences is impressive, as is the sweep of his interests."—*New York Times Book Review*

New in paper—\$12.95 paper, 388 pp.

Rituals of Marginality

Politics, Process, and Culture
Change in Central Urban Mexico,
1969-1974

Carlos G. Vélaz-Ibañez

Foreword by Richard N. Adams

"Documents how organizations of the poor may generate consequences unanticipated both 'from above' and 'from below'."—*Contemporary Sociology*

New in paper—\$13.95 paper, 310 pp.

At bookstores or order toll-free 1-800-822-6657. Visa & MasterCard only.

University of California Press

Berkeley Los Angeles New York Oxford

Revue française de sociologie

publiée avec le concours de
L'INSTITUT DE RECHERCHE SUR LES SOCIÉTÉS CONTEMPORAINES
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

59-61, rue Pouchet, 75849 Paris Cedex 17 — Tél : 40 25.11.87 ou 88

JANVIER-MARS 1991, XXXII-1

ISBN 2-222-96548-2

Déclarer sa profession	Francis KRAMARZ
Les nomenclatures socio-professionnelles : Royaume-Uni, Espagne, France	B. DURIEZ, J. ION, M. PINÇON, M. PINÇON-CHARLOT
Marché du travail artistique et socialisation du risque	Pierre-Michel MENDER
Les statuts de la pauvreté assistée	Serge PAUGAM
Contraintes et coûts d'investissement dans les réclamations écrites	Jean-Yves TRÉPOS

LES LIVRES

Abonnements :

L'ordre et le paiement sont à adresser directement à
Centrale des Revues, CDR
11, rue Gossin, 92543 Montrouge Cedex — Tél (1) 46 56.52 66
CCP La Source 33-368-61 CDR-Gauthier-Villars
Les abonnements sont annuels et partent du premier numéro de
l'année en cours

Tarif 1991 L'abonnement (4 numéros) France .	287 F
Etranger .	348 F

Vente au numéro :

Par correspondance Presses du CNRS 20-22, rue Saint-Armand,
75015 Paris Tél (1) 45 33 16 00 — Telex 200 356 F
A la librairie du CNRS, 295, rue Saint-Jacques, 75005 Paris
Tél (1) 43 26 56 11

Le numéro	92 F
---------------------	------

Sciences Sociales et Santé

Vol. VIII n° 4 Décembre 1990 Revue trimestrielle

Sciences Sociales et Santé s'attache à organiser un débat entre les disciplines de sciences humaines (anthropologie, sociologie, histoire, psychanalyse, économie) dans le champ sociosanitaire. La revue se propose de faire connaître les travaux et réflexions que ce champ suscite à l'intention de la communauté scientifique. Elle est publiée avec l'aide du Centre National de la Recherche Scientifique (CNRS), de l'Institut National de la Santé et de la Recherche Médicale et du Ministère de la Recherche et de la Technologie et de la Mission Interministérielle Recherche Experimentation.

Sommaire

Yves Souteyrand	Avant-propos
John R. Kimberly Laura R. Renshaw Scott D. Ramsey Alan L. Hillman J. Sanford Schwartz	Les DRG et la diffusion de la technologie médicale aux Etats-Unis : le cas de la RMN
Jean-Louis Lanoé Yves Souteyrand	La carte à mémoire santé en France : facteurs et contraintes de sa diffusion
Pascale Bourret Pierre Huard	Création, appropriation, recomposition : processus innovants dans la production du diagnostic prénatal
Caroline Well	Attitudes professionnelles et diffusion de la connaissance scientifique : les conférences de consensus sont-elles susceptibles de modifier les comportements des praticiens ?
Notes de lectures	
Résumés (anglais, espagnol)	

TARIFS D'ABONNEMENT 1991

(4 numéros par an)

	France	Etranger
Etudiants	210 FF	250 FF
Particuliers	280 FF	320 FF
Institutions	420 FF	450 FF

Prix de vente au numéro : 110 FF

Les abonnements sont annuels et partent du premier numéro de l'année en cours. Le paiement est à effectuer à l'ordre de CDR et doit être adressé à :

John Libbey Eurotext, 6 rue Blanche, 92120 Montrouge, France

JOURNAL OF LAW AND SOCIETY

Edited by Phillip A Thomas

Founded in 1974, the **Journal of Law and Society** is now established as the leading British periodical devoted to the study of the interaction of law with other social forces. Each issue of the journal contains a number of full length articles, often focusing on topical issues as well as a Book Review section and a popular Notice-board.

Recent Articles include:
The Critical Legal Science of
Han Kelsen
Iain Stewart
Rights and Social Move-
ments: Counter-Hegemonic
Strategies
Alan Hunt
Consent and the Legal Regu-
lation of Policing
*D Dixon, C Coleman and K
Bottomley*

ORDER FORM

JOURNAL OF LAW AND SOCIETY

Subscription Rates, Volume 18, 1991

Individuals £22.50 (UK), £26.00 (Europe), \$53.00 (N America), £29.50 (Rest of World)
Institutions £82.50 (UK), £88.00 (Europe), \$187.00 (N America), £104.00 (Rest of World)
Students £15.00 (UK), £18.00 (Europe), \$35.00 (N America), £19.00 (Rest of World)

Published Quarterly

- ☐ Please enter my subscription/send me a sample copy
☐ I enclose a cheque/money order made payable to Basil Blackwell
☐ Please charge my Access/American Express/Diners Club/
Mastercard/Visa account number

Expiry Date _____

For payments via the National Girobank, the Basil Blackwell account number is 236 6053

Name _____

Address _____

Postcode _____

Signature _____ Date _____

Payment must accompany orders

Please return this form to: Journals Marketing Manager, Basil Blackwell,
108 Cowley Road, Oxford OX4 1JF, England. Registered No. 180277. Or to: Journals
Marketing Manager, Basil Blackwell, Three Cambridge Center, Cambridge, MA 02142,
USA

Basil Blackwell

Oxford and Cambridge MA

Announcing a New Publication from
The University of Chicago Press

Journal of the History of Sexuality

Follow this emerging field as it unfolds on the pages of *JHS*
beginning with the inaugural volume!

The *Journal of the History of Sexuality* seeks to publish the best research of this newly emerging field. The *Journal* illuminates the history of sexuality in all its expressions, recognizing differences of class, culture, gender, race, and sexual preference. Its scope transcends temporal and geographic boundaries, from ancient to contemporary history, from Europe and the Americas to Africa and Asia. International scholars in the fields of history, anthropology, sociology, psychology, philosophy, classics, literature, film, art history, legal studies, and gender-related studies will be represented in the material published.

Editor

John C. Fout
Bard College
European History

Associate Editors

John Boswell
Yale University
Medieval History
Allan M. Brandt
Harvard University
History of Medicine and Science

Martin Dannecker
University of Frankfurt
Sociology

Lillian Faderman
California State University, Fresno
Literature

Estelle B. Freedman
Stanford University
American History

Atina Grossmann
Columbia University
European History

Gert Hekma
University of Amsterdam
Sociology

Review Editor

Michèle D. Dominy
Bard College
Anthropology

Gilbert Herdt
University of Chicago
Anthropology

Heidrun Kaupen-Haas
University of Hamburg
Medical Sociology

Carroll Smith-Rosenberg
University of Pennsylvania
American History

Randolph Trumbach
Baruch College, CUNY
European History

Martha Vicinus
University of Michigan
Literature

Jeffrey Weeks
Universities of Kent and
Southampton
English History

Order now and take advantage of the special rates listed below!

CHARTER SUBSCRIPTION RATES—15% OFF REGULAR RATES

Individuals \$24.00; Institutions \$49.00; Students \$17.00. Outside USA, add \$3.00 for postage. MasterCard and Visa (or foreign equivalent) payments accepted. To order, send check, purchase order, or complete credit card information (including expiration date, account number, and signature) to The University of Chicago Press, Journals Division, Dept. SF1SA, P.O. Box 37005, Chicago, IL 60637, USA.

Family Violence

Volume 11 of the Crime and Justice series

Volume editors: Lloyd Ohlin and Michael Tonry

Series editors: Michael Tonry and Norval Morris



Increasingly drawing the attention of legislators, sociologists, criminologists, policymakers, and the public at large, family violence is a far-ranging problem that was once tolerated in relative silence. In this climate of increased awareness, just how much do we really know about the actual causes and effective control of violence within families?

Family Violence presents a review of current research on the legal, social, and criminological issues surrounding family violence. Providing a comprehensive approach to all areas of family violence (including domestic assault and homicide, marital rape, child abuse, and reprisal), this collection of commissioned essays includes

Family Violence as Crime

Lloyd Ohlin and Michael Tonry

Criminal Approaches to Family Violence, 1640 to 1890

Elizabeth Pleck

The Explanation of Family Violence: The Role of Biological, Behavioral, and Cultural Selection

Robert L. Burgess and Patricia Draper

Family Violence Research Methodology and Design

Joseph G. Wells

The Incidence and Prevalence of Violence in Marriage

Irene Hanson Frieze and Angela Browne

The Incidence and Prevalence of Child Maltreatment

James Garbarino

The Incidence and Prevalence of Criminal Abuse of Other Family Members

Mildred Daley Pagelow

Intra-family Violence, and Crime and Violence Outside the Family

Gerald T. Hotaling, Murray A. Straus, with Alan J. Lincoln

Cessation of Family Violence: Deterrence and Dissuasion

Jeffrey Fagan

Criminal Justice Procedures in Family Violence Crimes

Delbert S. Elliott

Treatment Programs for Family Violence

Daniel G. Saunders and Sandra T. Azar

Toward a Jurisprudence of Family Violence

Franklin E. Zimring

1989 Cloth 595 pp. \$37.50 ISBN: 0-226-80806-8
Paper \$19.95 ISBN: 0-226-80807-6

The University of Chicago Press

11030 S. Langley Ave., Chicago, IL 60628

Footnotes sending you on a foot race?
Trying to build a better bibliography?
Sticky fingers snatching selections from your shelves?
Complete your collection with back issues of

American Journal of Sociology

While supplies last, you can order back issues of the journal and build a functional collection that will serve you year after year. Choose single copies, volumes, or a set of all remaining issues at discounted prices. Available are issues covering a range of topics, including

John Hagan, John Simpson, and A.R. Gillis, A Power-Control Theory of Gender and Delinquency 92:4

Denise Bielby and William T. Bielby, Household Responsibilities and the Allocation of the Work Effort 93:5

Otis Dudley Duncan, Magnus Stenbeck, and Charles Brody, Discovering Heterogeneity: Continuous versus Discrete Variables 93:6

Mark Granovetter, Economic Action and Social Structure: The Problem of Embeddedness 91:3

Glenn Firebaugh and Kenneth E. Davis, Trends in Antiracial Prejudice, 1972-1984: Region and Cohort Effects 94:2

Theodore D. Kemper, How Many Emotions Are There? Wedding the Social and Autonomic Components 93:2

Michèle Lamont, How to Become a Dominant French Philosopher: The Case of Jacques Derrida 93:3

Michael Hout, More Universalism, Less Structural Mobility: The American Occupational Structure in the 1980s 93:6

Back issue order form

American Journal of Sociology

☐ Yes! Please send me the following back issues of *AJS*:

☐ Set of 25 remaining issues (Vols. 91-94, 1985-1989)

☐ \$87.50 Individuals ☐ \$159.40 Institutions

☐ Individual volumes 91-95 (6 issues per volume)

☐ \$26.40 Individuals ☐ \$48.85 Institutions

Specify volume: ☐ 91 ☐ 92 ☐ 93 ☐ 94 ☐ 95

☐ Single copies ☐ \$5.00 Individuals ☐ \$9.30 Institutions

Indicate volume/number: _____

All journal rates include domestic postage; outside USA, please add 75¢ per issue additional postage.

Availability of back issues is subject to current inventory at the time your order is processed

Name _____

Address _____

City _____

State/Zip _____

Payment Options

☐ Charge my ☐ MasterCard ☐ Visa Exp. date _____

Acct. No. _____

Signature _____

☐ Check enclosed (payable to *AJS*) ☐ Purchase order enclosed

Mail to The University of Chicago Press, Journals Division, P.O. Box 37005, Chicago, IL 60637.

SAIBI 7/90

SOCIOLOGY



Collective Action and the Civil Rights Movement

Dennis Chong

"An illuminating marriage of theory and history from which students of social movements and collective action of all kinds can learn. It is one of the best books on social movements I have ever seen."—Michael Taylor, University of Washington, Seattle

Paper \$16.95 270 pages

Cloth \$42.50

*American Politics and Political
Economy series*

Also Available

The System of Professions

*An Essay on the Division of
Expert Labor*

Andrew Abbott

Paper \$19.95 452 pages

Library cloth edition \$49.95

*Winner of the 1991 Distinguished
Publication Award of the American
Sociological Association*

HERITAGE OF SOCIOLOGY SERIES

The Early Essays

Talcott Parsons

Edited and with an Introduction
by Charles Camic

By gathering the majority of Parsons's articles and book reviews published between 1923 and 1937, Camic supplies the first comprehensive selection of the writings of the "early Parsons."

He identifies three overlapping but relatively distinct thematic areas in the early development of Parsons's ideas: that on capitalist society and its origins, that on the historical development of the theory of action, and that on the foundations of analytical sociology.

Paper \$19.95 384 pages (est.)

Library cloth edition \$45.00

On Social Organization and Social Control

Morris Janowitz

Edited and with an Introduction
by James Burk

This important source volume provides a comprehensive overview of Janowitz's wide-ranging scholarly writings published over the four decades following the end of World War II. Burk provides a richly detailed, critical account of Janowitz's intellectual development, placing his writings in historical context and showing their continuing relevance for sociological research.

Paper \$17.50 332 pages

Library cloth edition \$34.95

FROM CHICAGO



Kamikaze Biker

Parody and Anomy in Affluent Japan
Ikuya Sato

Foreword by Gerald D. Suttles

In this firsthand account of Japanese high-risk car and motorcycle racing, Sato shows how developing affluence and consumerism have spawned various deviant life-styles among youth.

Cloth \$32.00 (est.) 272 pages (est.)

Of Revelation and Revolution

Christianity, Colonialism, and Consciousness in South Africa
Volume 1

Jean and John Comaroff

Grappling in exciting new ways with issues of power and resistance, agency and intention, this study of "the colonization of consciousness and the consciousness of colonization" provides fresh insight into the dialectics of culture and power that shape all historical processes.

Paper \$18.95 432 pages

12 halftones, 6 maps

Library cloth edition \$60.00

Now In Paper

Peasants Against the State

The Politics of Market Control in Bugisu, Uganda, 1900-1983

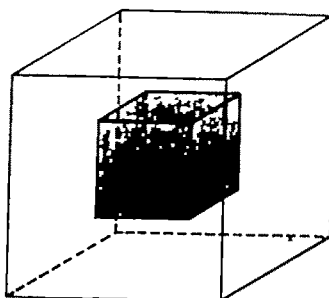
Stephen G. Bunker

With a new Afterword

Focusing on peasant struggles for market control over coffee exports in Bugisu from colonial times to the present, Bunker shows that these freeholding peasants acted collectively to effectively influence and veto government programs.

Paper \$14.95 304 pages

Winner of the 1989 award for Distinguished Scholarship from the American Sociological Association's Political Economy of the World System Section



Now In Paper

Knowledge and Social Imagery

Second Edition

David Bloor

In the radical and pathbreaking first edition of this book (1976), Bloor argues that science is a socially constructed form of knowledge. Now, Bloor responds in a new Afterword to the heated and productive debates engendered by his book.

Paper \$13.95 180 pages (est.)

THE UNIVERSITY OF CHICAGO PRESS

5801 South Ellis Chicago, IL 60637



Race and Schooling in the South, 1880-1950

An Economic History

Robert A. Margo

"Margo applies a social historian's sensitivity to human struggle and an economic historian's meticulous devotion to quantitative data to central questions about racial discrimination The result is an important, readable book."—J. Morgan Kousser, author of *The Shaping of Southern Politics*

Cloth \$24.95 174 pages

34 tables, 8 line drawings

NBER series on Long-term Factors in Economic Development

The Color of Strangers, the Color of Friends

The Play of Ethnicity in School and Community

Alan Peshkin

In this well-crafted exploration of the role of ethnicity in the lives of students and educators at Riverview High, Peshkin recounts the many remarkable successes—and the few disturbingly persistent failures—of a community that has fashioned its own brand of ethnic harmony.

Paper \$15.95 320 pages (est.)

Library cloth edition \$45.00

The Scale of Imprisonment

Franklin E. Zimring and Gordon Hawkins

Two of the nation's foremost criminal justice scholars offer a comprehensive assessment of the factors behind the overcrowding of American prisons. Their remarkable findings reveal that the growth of prison population has no direct relationship with the factors usually deemed responsible.

Cloth \$29.95 264 pages

13 tables, 14 figures

Studies in Crime and Justice

THE UNIVERSITY OF CHICAGO PRESS

5801 South Ellis Chicago, IL 60637



Harvesting Change

Labor and Agrarian Reform In Nicaragua, 1979-1990

by Laura J. Enriquez

Laura Enriquez provides a unique analysis of the dilemmas of reform in an agrarian society by studying the efforts of the Sandinista government to promote balanced economic development and redistribute agricultural resources in Nicaragua.

272 pp., \$37.50 cloth, \$12.95 paper

The Political Economy of World Energy

A Twentieth-Century Perspective

by John G. Clark

In this timely book John Clark provides a historical context for the present-day influence of oil-producing nations upon the world economy. He analyzes with striking clarity the political, institutional, social, and economic factors affecting world energy supplies and use.

417 pp., \$39.95 cloth, \$14.95 paper

available at bookstores or from

The University of North Carolina Press

Post Office Box 2288 • Chapel Hill, NC 27515-2288

Toll-free orders: 1-800-848-6224

Community of Suffering and Struggle

Women, Men, and the Labor Movement in Minneapolis, 1915-1945

by Elizabeth Foa

Foa explores women's involvement in labor and political organizations and the role of gender and family ideology in shaping unionism in the twentieth century. "Foa's work is . . . at the cutting edge."

—Daniel J. Walkowitz

approx. 380 pp., 35 illus.,
\$39.95 cloth, \$14.95 paper
Gender and American Culture

Quantitative Methods for Historians

A Guide to Research, Data, and Statistics

by Konrad H. Jarausch and Kenneth A. Hardy

A theoretical and practical guide for the application of quantitative analysis in historical research, this book includes techniques for defining a problem, building a data set, using statistical methods, and interpreting results.

272 pp., \$34.95 cloth,
\$11.95 paper

Case T-8607 800-445-0038